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THE ASSOCIATION REVIEW

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KINDERGARTENS FOR THE DEAF.

ELLEN E. TAYLOR, CLEVELAND, OHIO.

ARE THEY NEEDED ?

Unlike the full-panoplied Minerva, a new idea springs into the arena of thought asking the world to heed its message while it is still encumbered by ignorance of a way to fulfill its mission. The truth is there, but can only manifest itself as its all-compelling power overcomes obstacles of circumstance and opposition.

The value—pro and con—of kindergartens for hearing children is still such an unsettled question even among educators that numerous authorities may be quoted in favor of either side, their testimony ranging all the way from an earnest and enthusiastic report of their wholesome influence in some parts of the country where they have had free course, to the views of others who look upon them as having an over-stimulating and deleterious effect upon the children entrusted to them. The multitude occupy the position of vast indifference and inertia, having no positive opinions either for or against, simply from lack of thought on the subject.

If the crop is still unthreshed and the grain of truth unseparated from the chaff of ignorance when hearing children are to be considered, how much more of a task lies before those who are weighing theories and experiences to find the best for the deaf child.

If, as we are taught by both training school and mature life, the normal child or man is the basis upon which all programs—either for school, or action after school,—are formulated, all

experience having proved that if the average child or man be given the proper conditions for growth or action, both physical and mental, those above the average will find no difficulty in attaining for themselves freedom and opportunities equal to their abilities, while to those who are trying to help the child or man who is handicapped in some way, a consistent ideal is supplied.

Thus if our educators could agree that two years of kindergarten life should be granted to each hearing child, in order to give it the start it needs, we who think of the deaf would find our question of the advisability of kindergartens for the deaf settled in the affirmative, and could then go with a free mind to plan our work.

It may be well to think over the needs of the children and the aims of the kindergarten that we may see if the latter will be likely to supply the former. The deaf child has the same needs as the hearing child and in addition those arising from his lack of "correspondence with his environment," which stands as a wall between him and his goal.

Many well meaning and wise people insist that the child between four and six years of age is better off at home—free to spend his time out-of-doors and at his own pleasure rather than in school, even though a kindergarten seems mostly play.

For the child whose mother is neither compelled by poverty nor induced by wealth to leave her little ones to the care and society of paid caretakers, but is at leisure to be a companion to her children, these years spent with the mother in the joyous industry of investigation of all the phenomena of life are precious beyond all computing. Even then it is possible that some good is missed unless the family be a large one. The one child of any family suffers more from his isolation than most people suspect. In the larger opportunities of the kindergarten we find the child beginning to realize that others have rights as well as himself, that he has a part to do which adds to the happiness of his fellows. This is an almost impossible lesson for him to learn when surrounded by grown people only, for a child's intuition is quite correct that older people are created to look after him, though his application of that truth is apt to be rather to his disadvantage. If hearing children are the better for the society of their

peers, how much more does a deaf child need that inspiring and controlling influence!

As soon as deafness is discovered in a child he not only becomes an object of solicitude to his family, but also to everyone who sees him. The knowledge of his condition is often such a shock to the mother and such a growing grief as to almost unfit her for her duties. Long before he can venture outside his doorway his quick mind has discovered that the grown-ups are certain to respect his whims, and that as a whole the children of his acquaintance are trained to yield his desires a ready deference.

The result, in two or three years, would be amusing if it were not pitiful. What teacher has not seen father, mother, grandparents, stand about in helpless bewilderment while some midget expressed his or her aversion to something in a way that would hardly be tolerated in a hearing child. The description by Ruth McEnery Stuart of "Sonny's" exploits when trying to secure the family clock for a plaything, must remind many a one of similar scenes with children. As soon as a trip to the nearest grocery can be accomplished, another element—prompted by the kindest motives—begins to work mischief. Gifts of fruit, candy, or anything, slip into the little hand. By and by it does not seem necessary to the child to wait until the desired thing is offered. Being unrebuked, it soon becomes a habit with him and the distinction between "mine and thine" has no meaning to the child. After a few years of this sort of procedure both the parents and the child feel that something is not quite as it should be. Unbridled will has never yet brought happiness because, forsooth, so many things are just as unobtainable as the moon. Fortunately these extreme cases are not the invariable rule, though it is seldom that a deaf child is taught the same degree of self-control that his hearing brother and sister have acquired.

THE AIMS OF THE KINDERGARTEN.

Now, what are the needs of these children at the age of four years?

- I. Happy occupation for a portion of each day.
- II. The society of other children while placed upon the same basis of responsibility as they.

III. To have an explanation of the panorama of life, an answering of the endless questions which must be in the little brain.

IV. To gain an appreciation of the joy of working with others toward some end that will bring pleasure to all.

V. To gain the powers of expression and comprehension that will put him in communion with all about him.

If these needs are to be met, the Kindergarten must supply an atmosphere where all kindly deeds and eager thoughts may freely find opportunity for development. We must not measure results by hand work accomplished but watch for the unfolding of mind and character, trying to make sure that every condition surrounding them is as nearly right as possible.

All kinds of hand work bring increased growth to the brain, and every time a flower is painted a keener and more accurate observation is fostered. In the games they gain a sympathetic interest in the life that surrounds them. To put one's self in the place of someone or something else in imagination is always a broadening of our mental horizon, and the child who plays he is a bird and has a nest in the bushes will feel a sense of companionship with his "little brothers of the air," and cruelty will be less likely to harbor in his thoughts.

His tasks are suited to his capacity. Thus not being discouraged by the magnitude of the proposed bit of work, he not only does it with cheerfulness, but it leaves him with an agreeable sense of power, which causes something more difficult to look alluring. After a time the parents begin to speak of the increased happiness and resources of the child at home who, finding a satisfying outlet for his energies, loses his extreme capriciousness. We see the faces which at first were so unresponsive shine with awakened thought, and those who seemed entirely self-centered, begin to show regard for others.

THE KINDERGARTEN AS AN ASSIMILATOR.

The kindergarten performs an important function as an assimilator. Even though the child is beyond six years of age when he enters a school, the first few days are pretty sure to be trying ones. Gradually interest in the play and work about him

restores his composure, and the teacher may more correctly decide which group he should join or whether his abilities are such that with some special instruction he would be able to keep his place in one of the grades.

Everyone who has taken the new ones as they come in and prepared them for entrance to their proper niche in the commonwealth of school, will realize what that work means. For instance, one boy delights in overturning his neighbor's possessions; another finds his chief joy in making faces; another is so shy as to suffer intensely; while another resembles nothing so much as a windmill continually in motion. To get these all ready for the quiet concentrated attention necessary to secure any results in speech reading and speech, requires more time and effort than most people who have not done it could imagine.

Every year some applicants for admission to the school are found ineligible because of mental inability. Some of these cases manifest their true condition at once to an experienced eye. A right estimate of others can only be reached after days or perhaps weeks of careful testing. If all the newcomers arrived at the beginning of the year it would simplify matters, but each term brings its quota of new material to be adjusted and organized. and just as peace has settled upon us and the prospect of making more rapid progress looks bright, a new child is ushered in and the process of making "straight paths" begins again. An important element assisting in getting the new ones started is the public sentiment which grows rapidly in the little community.

SPEECH IN THE KINDERGARTEN.

But you say what about speech in the kindergarten?

My order of events now is *Development* first, last, and all the time, speech reading next, then speech. Like all beginners I confidently expected to get everything at once, little realizing how difficult it was for the child to learn a word on the lips, to speak it, and to write, nearly at the same time. Some words are comparatively easy even for the babies, but our line of thought was sadly restricted if we had to wait until the word could be pronounced. If accepted when incorrectly spoken, a word

became a stumbling block for the future, forming a bad habit of speech. From these dilemmas speech reading has proven my best refuge.

We have a good time every day at our breathing and tongue exercises, and when a word can be spoken, it is proudly put upon the wall slate. It is the natural way at least, for how many thousand times does a child hear a word before he tries to reproduce it! I found this last year a gratifying tendency among the children to try to use their vocal organs more spontaneously than ever before in my experience, but definite speech work and writing are left until the child is six years old.

We have for a short period every day exercises to secure freedom of arm movement and to develop their powers of visualization preparatory to writing. The class stands before the wall slate. A series of lines forming a simple design perhaps is drawn upon the slate. After a few seconds it is erased and some child is asked to reproduce it. If not successful, the crayon is handed on until one is found who has been able to form a mental picture of it.

When this exercise has been continued from day to day until each child has learned to think for himself, they look carefully at what is drawn, then go to their appointed places at the wall slate and try to reproduce, not only the form in a crude way, but attempt to make it in neatness and finish as nearly like the original as possible. If a tendency for copying from each other is shown, each child may be given an individual pattern to remember. Careful work is encouraged by erasing all that has not been done in the best manner possible to that particular child.

SOME THINGS THAT HAVE BEEN DONE.

Much work has clustered about a doll house this year. A box was put on end and fitted with floors. The painting with regular house paint was quite an event. Wall paper was designed and prepared; then we must have bordering. Each child in turn chose the wooden tablets he wished and laid what he considered a pretty pattern on the table. Each design was copied on the wall slate, and when all were ready the Principal was called in to select the best for the house. Great interest was

aroused but no spirit of selfish disappointment, as they evidently felt the perfect justice and impartiality of the decision. These preliminaries over, the actual business of making the border began. A sheet of colored paper, scissors, pencil, mounting paper, and paste being ready for each child, the fingers were soon busy tracing their pattern forms, using the wooden tablets as guides, and as soon as sufficient were cut the pasting began.

I was uncertain about the wisdom of allowing this kind of pasting and cutting, fearing that it would be too fine work for the children. Careful watching could detect no signs of fatigue even in the babies, for they cheerfully cut and were satisfied with their productions even though the corners were more numerous than the design demanded. We made a rag carpet for one room, each child assisting in weaving on a tiny loom the rags he had previously sewed.

We have found much satisfaction in rythm work. The children gather around the piano putting their hands upon it. One is chosen to close his eyes in order to prevent the test being a matter of sight instead of feeling. A march or skip is played and when it is over, the child shows me how he would obey the music.

Every day we march, accompanied by a drum and triangle in the hands of the children chosen for their well spent time in other matters. The first year pupils join us and it is a much anticipated period of the day. A window stick beaten upon the floor by a teacher helps to keep time, and altogether we make noise sufficient to let everyone in the building know what we are about. Once a week the children go in turn to the cupboard and select any materials for work or play that they desire. No one is allowed to know what another has chosen until all have decided, as some seemed to have little power for independent choice, but were guided largely by what others did.

A record has been kept of what they did, which revealed interesting characteristics and modes of work, also a development of originality proving the great value of that period, but longer observation and much meditation will be necessary on the part of the teacher before definite conclusions—worth handing on—are reached.

When the morning is over the children set the tables in the kindergarten room, the first year class comes in with its teacher, and after a simple blessing we all enjoy a luncheon brought from home. This over, all go to play for twenty-five minutes.

The babies, numbering three, who live within a moderate distance, go home after luncheon under escort of mother or sister. Those who live miles away and must wait for someone to come for them, play in the afternoon out of doors if the weather is good, or if necessary, in the housekeeper's room, while I keep the older ones for speech and written work.

Patrons of a day school have quite a problem to solve in regard to getting their small children safely to and from school. Whenever possible an older child in the family is transferred to a school near ours, and can then easily leave the younger child in the morning and come for him in the afternoon. The mothers too show a most heroic spirit, in many cases sparing no expenditure of time and strength to bring the children to school.

The day school has its reward for all these extra responsibilities in the alertness of the children. Traveling ten or twelve miles a day through a busy city cannot fail to arouse many an idea in the minds of the children which would hardly be thought of did they spend most of their time within a radius of two or three blocks from home, while the constant association with and observation of hearing people perceptibly influence the appearance and behavior of the children. Visitors frequently express their gratification at finding the children so well able to look after themselves.

THE PERSONNEL OF THE CLASS.

In the class of fifteen last year we had two happy, roly-poly babies of four years. That is, we celebrated the beginning of their fourth year after they came to us. They tangled us up in our march and were especially comfortable to love. It was a waste of time and expecting too much of them to give them any speech reading except in play or in connection with something they wished very much. They joined in the tongue and voice exercises and received strong approval if they succeeded in

giving a good element. In the occupation work the crudeness of their portion was never noticed if they had tried to do their best. In the games they bore their share with enthusiasm.

Five other children of six years and a little older—having gained powers of attention—are quite ready after their year or more of kindergarten work to begin regular first year work.

Another five ranging from six to ten years of age have lost their hearing through illness, and two more have partial hearing. These have been given as much first year work as was possible without infringing upon the time needed by the others.

Last and largest of all is our twelve year old girl who was brought to us in the spring, never having been to school. Her life has been a succession of ailments culminating in deafness. Now that her hearing is entirely gone we have a girl who can talk so fast as to be almost unintelligible, ask questions by the yard, yea, by the furlong, but has not courage enough to attempt the simplest bit of work; while learning to write a word, which she could say perfectly, was a task requiring more perseverance than she could gather for weeks. Those who have started similar cases on the highway of learning will realize the difficulties.

One very interesting case was that of a boy about eleven years old who was sent to us from a hearing school, with the message that he must be deaf, for he did not understand anything that was said to him. He could write his name after having been in that school three years, but words seemed to have no meaning to him. It became clear within a few days that his hearing was almost if not quite normal. A simple thing which he could do quite well when alone with the teacher, seemed impossible to him when working with a class, and if individual work was continued more than ten minutes at a time, he seemed to lose all power of memory. The only alternative was to let him entirely alone until he had recovered from his fatigue, then a little more could be done. We kept him several weeks, until we found to our satisfaction that he could be taught. After the first two weeks he gained steadily, and no boy was ever prouder over each word that he learned to understand and write than he. As our school was over-crowded, and as he was not deaf, we

sent him back to his former teachers, though it was a trial to lose his attractive and interesting presence. It would be most fascinating work to try to find and remedy the difficulty in his mental state.

THE JOYS OF THE WORK.

Overbalancing the difficulties, however, were the joys. The wonder of seeing our little Emma restored to happiness was worth all the rest of the year's work. Her hearing had been taken suddenly when she was between four and five years of age, and when she came to us last September, six years old, she was a sad, timid child whose brown eyes told a pathetic tale of the burden of silence. She soon became interested, but showed no enthusiasm until the first snow came. As we played in the yard she seemed to be aroused to memories of merrier days. After that we saw a decided gain. Three or four times in moments of great excitement, she said a word or a sentence, but as it was in a foreign tongue, it formed no clue to help her on. In February she began to make rapid progress, and from the time that she could say her first sentence, proving to herself that she could make herself intelligible to those about her in a natural way, she became again a child of contentment and merriment and has easily led her division.

Could we have had sufficient assistance much more might have been accomplished, and in the ideal kindergarten an assistant in charge of each group would obviate the difficulties which met us this last year. The children of different ages would then have the work adapted especially to their stage of development, and the evils of being either pushed or hindered would be eliminated. Those children who can have two years of natural, quiet growth, gaining self-control, regard for others, imagination, which brightens all future life, the faculty for careful observation, creative power, attention and perseverance, should make rapid and most satisfactory progress in the first and each succeeding grade.

PLAY AS AN EDUCATIONAL FACTOR.

Leading educators agree that no more potent factor than play can be found to influence the development of a child. It

influences the will, gives physical training, and cultivates all the faculties which are needed in later years. Dr. Gulick says that "The way in which one pursues pleasure shows and produces morality far more than the compulsory activities of daily life." This being true, we must give each child full opportunity for wholesome, hearty, self-directed play at home, and may still find that three hours of directed play and work each day of the two years in kindergarten will gather enrichment for every other year of life.

The close fellowship of mothers and teachers made possible in a day school for the Deaf forms one of our greatest and most far reaching advantages.

Our ideal flits on before, inspiring us to stronger and worthier effort, while we stumble on, impeded by ignorance and conditions which we have not learned to control, yet positive that the ideal will some day, somewhere, be fulfilled.

FORMATION AND DEVELOPMENT OF ELEMENTARY ENGLISH SOUNDS.

CAROLINE A. YALE, NORTHAMPTON, MASS.

IV.

CONSONANTS—(CONCLUDED).

L. [ɹ]

Formation.—The point of the tongue (Bell says the fore part) is raised and closed against the upper gum but an opening over each side allows the escape of an uninterrupted stream of voice. See note on liquids under *M*. Ex., *lark*, *fold*, *pail*.

Method of development.—I. Teach by quick repetition of syllable *la*, *la*, *la*. When the pupil recognizes and imitates the flapping motion of the tongue in giving that syllable, let him hold the initial position as the position for *l*. II. The position of the tongue may be shown against the upper lip, taking care that there be distinct apertures at the “corners of the mouth.” When this position is well taken by the pupil the tongue may be drawn slowly back until it touches the upper gum and voice may be added. Vibration is distinctly to be felt in the cheeks.

NOTE.—*L* may be considered as non-vocal when following a non-vocal consonant. Contrast *plight*, *blight*, *clue*, *glue*; etc.

In such words as *bottle*, *saddle*, etc., the *l* final has the function of a vowel.

Y. [ʏ]

Formation.—Top or front of the tongue raised and shut at the sides leaving only a small center aperture through which voice passes out. The tongue in forming this sound is almost in position for the vowel *ē*, but the aperture over the center is closer. The difference between the two sounds may be seen in such words as *ye* and *year*, in which the vowel *ē* follows the consonant *e* or *y*. Ex., *you*, ———, ———.

Method of development.—I. By manipulation from *z*. Often simply separating the teeth is all that is necessary. II. By

forcible retraction of the tongue from the position assumed for vocal *th*, while the pupil's hand is placed under the teacher's chin. III. If developed after *ē* it may be taught by contrast as a closer form of that sound.

Wh. [ʍ]

Formation:—Lips rounded. Breath passing out between their approximated inner edges. Tongue raised slightly at the back. Ex., *what*, —, —.

Method of development:—Imitation. If necessary attract the pupil's attention to the action of the inner muscles in rounding the lips.

W. [ɹ]

Formation:—Position of the lips the same as for *wh*, this being the vocalized form of that sound. The position of the lips for *w* is almost the same as that for *oo*, but the aperture is closer. The difference between the two sounds may be seen in such words as *woo*, *woof*. Ex., *want*, —, —.

Method of development:—Contrast with *wh*.

NOTE.—In regard to *w*, when it occurs before a vowel, Smart says that it “is a consonant, having for its basis the most contracted of the vowel sounds, namely *oo*, which sound, being partially obstructed by an inward action of the lips, and then given off by an outward action, is changed from a vowel to a consonant.”

Ch. [tʃ]

Formation:—The front of the tongue in position for *sh* is closed and then forced open by the breath.

Bell gives this sound as a combination of *t* and *sh*. Various other authors give the formation as stated above. Ex., *chair*, *preacher*, *larch*.

Method of development:—I. Imitation. Let the pupil notice the position of the tongue and feel the escape of breath. II. By combining the two elements *t* and *sh*. III. By analogy from *p* and *t*. Let the teacher repeat *p, t, ch; p, t, ch*, again and

again while the child watches the action and feels the breath. He will thus come to know that the action of the tongue is the same while the point of closure shifts and the teeth are nearly closed for *ch*. If *k* has been taught, that may be given as the fourth in the series—*p, t, ch, k*. Emphasis on the position of the teeth will largely avoid the danger of making this sound too explosive in character. *Sh*, the second part of the compound sound, is certainly continuous not explosive.

J. [ʝ]

Formation:—Position and action of the tongue the same as for *ch* of which *j* is the vocalized form. This sound is also represented by the letter *g* called “*g soft*.” Ex., *jump, gem, legion, age, judge*.

Method of development:—I. Contrast with *ch*. II. By analogy. Teaching it as one of the series of shut voice consonants, *b, d, j, g*, (hard).

NOTE.—It may be well to teach *initial j* as *jʊ*, and *final j* as *ʊj*. *Final j* may be written as *j_{ch}*, thus indicating a final breath vanish.

H. [ɒ]

Formation:—*H* is an expulsion of the breath through the open glottis. Ex., *he*, —, —.

Method of development:—Imitation. Hold the pupil's hand before the teacher's mouth while she gives *h*. Then induce the child to produce the same. Care should be taken that the chest wall be kept raised.

NOTE I.—*H* is the emission of breath through the position for the sound following it as will be seen in the pronunciation of the following words: *at, hat; eat, heat, all, hall; it, hit; old, hold*.

NOTE II.—In practicing *h* alone let the tongue be left flat and the mouth open. The necessary force of the stream of breath may be shown the pupil by blowing a slip of paper, a feather, or a candle flame. In cases of nasality the pupil may be made aware of the streams of breath from the nose by breathing against a wall slate, or on a mirror.

X.

X is the equivalent of *ks*. Ex., *box*. In combining the two elements *k* and *s*, it is often well that the teeth be placed in position for *s* before the *k* is given. The pupil may be made aware of the expulsion of the breath by holding his hand before the teacher's mouth.

Q.

Q is always followed by *u* and the combination *qu* is equivalent to *kwh*. Ex., *quite*, *inquire*.

(To be continued.)

A VISIT TO THE SCHOOLS FOR THE WEAK-MINDED IN DENMARK AND NORWAY.¹

Mr. H. Stelling, a teacher in the Institute for the Deaf in Emden, had the opportunity last year of visiting some of the institutions of Denmark and Norway. His particular object was to study the results of the instruction of the Deaf who are less endowed with intelligence; and this he could do most conveniently in visiting the schools of these two countries, where the separation of the Deaf according to their degree of intelligence is an established fact, and where the institutions for the Deaf are so organized as to fulfill this object. Mr. Stelling has had occasion to make comparisons and to give his judgment upon the value of the methods used in the instruction of the Deaf, but he adds that he does not intend by this to make any proposal tending to a reform of the method actually practiced in the schools of Germany.

His report is divided into four paragraphs; and we intend to give a short account of each of them.

I. THE R. INSTITUTE OF COPENHAGEN AND THE METHOD OF THE MANUAL ALPHABET.

In respect to Denmark it is to be noticed before all that since 1891 the separation of the Deaf according to their mental capacity has been organized as follows. The Institute of Fredericia admits every year all the Deaf of school age, and after a year's trial they are divided into the Deaf improper (who have some trace of hearing, or who have spoken), and the so-called Deaf proper, these last being then subdivided into three classes: A, B, C.

¹ Prepared for THE REVIEW by Prof. C. Ferreri, Boston, from the German publication: "Die Erziehung der schwachbegabten und schwachsinnigen Taubstummen und die Teilung nach Fähigkeiten überhaupt." Von H. Stelling, Taubstummenlehrer in Emden.—Leipzig, Verlag von Carl Merseburger, 1902.

The classes A and B remain in the Institute of Fredericia, while the first mentioned (Deaf improper), are sent to the Institute of Nyborg, and those of the class C to Copenhagen. The two institutes therefore have pupils from the 2d to the 8th school year, and they are divided into 7 classes. In the Institute of Copenhagen, there is besides a special class formed of the Deaf of little intelligence, in the 3rd, 4th, and 5th school years, (being formed only in 1896). In this period of time there have graduated from this class three pupils capable of being confirmed, and three without being confirmed, notwithstanding they had completed the course of eight years instruction. It should be noted that also for these pupils who form the class D, the school work has not been without good results. They have received all the benefit possible in their condition. In this way they avoid committing the impropriety of sending the Deaf of little intelligence to the schools for feeble-minded children. Indeed the contrary has happened, as seen from the catalogue of the Institute of Copenhagen, some Deaf-Mutes having been sent there from the idiot asylum. There are besides in Copenhagen two small institutes under the supervision of the Government, and of the Principal of the Royal Institute, for the children of the city whose parents prefer to keep them at home, not wishing to put them in the large institutions.

In regard to the division of the Deaf into the classes already mentioned, it is done by a special commission composed of three principals, and one representative of the Government, who meet in the Institute of Fredericia a little before the close of the school year.

Among the pupils of the class C, however, a kind of selection is made during the trial year, and especially after the first half year. From that on the weak-minded pupils are excluded from the lessons in articulation, and are only taught by means of writing, but without the use of the manual alphabet, which has never been introduced into the Institute of Fredericia, thanks to the energetic resistance offered by the Principal Jörgenson. At the end of the year those pupils are sent to Copenhagen, where they are taught writing, and where the manual alphabet is used as a didactic means.

The final result of the selection mentioned is the following: About 25 per cent. Deaf improper come to Nyborg, from 55 to 75 per cent. remain in the classes A—B at Fredericia, the others, 18 to 20 per cent., are sent to Copenhagen. The manual alphabet therefore is used for the instruction of only one-fifth of the Danish deaf children.

“In order to be able to reply to the question,” says Mr. Stelling, “whether the Institute of Copenhagen, by the use of the manual alphabet, has succeeded in advancing the education of its pupils in a greater degree than the other institutions, with children of equally weak minds, I attended the lessons of every class beginning with the first. In consequence of my observations I must state that the Institute of Copenhagen may rest well satisfied with its work, but this good result does not depend upon the use of the manual alphabet, but rather, in my opinion, upon the following favorable conditions:

“1. From the good selection of material used in teaching, and from the form taken from real life;

“2. From the exact intuitive representation, and from the particular explanation;

“3. From the accurate exercise, and the thorough learning of the explained material.”

The practical examples which Mr. Stelling has taken from the teaching, the books used in the schools, and from the manner of teaching of the colleagues of Copenhagen, demonstrate clearly that his observations are well founded upon fact. The manual alphabet, one may observe, is nothing else than another way of writing, and would be of no use had the pupil not first something in his head to write and to communicate. In regard to the value and utility of a purely objective method, to which we must attribute the merit of the results of the instruction of the weak-minded Deaf, Stelling concludes with this didactic maxim: “Material which is taken from the real life of the child has no need of long explanations.” Everything depends upon the continuous repetition (from 10 to 12 times), of the same thing, with the object of fixing the desired knowledge in the mind of the less intelligent. Neither must one believe that the children lose pleasure in the school on account of the frequent repeti-

tions. Experience has taught the contrary: the feeble minded children find great satisfaction in showing that they know something, as happens in the exercise of repetitions.

A trial made in this sense gave as a result that of the children who were given the task of writing from memory an exercise from their copy-book, explained to them two years before, the weakest minded reproduced it in almost the same words, while the better pupils wrote it in a more diffuse and individual form. In short from what he observed, Mr. Stelling thinks he may conclude,—and we are of the same opinion—that the good effects depend only upon the manner used in teaching, and can not be ascribed, as the colleagues of Copenhagen believe, to the use of the manual alphabet. He concludes thus: “To the question if we should renounce our oral method, in favor of the manual, I must reply absolutely no!”

Mr. Stelling then passes in review the expedients proposed lately by Heidsiek, Schumann, Göpfert and Forchhammer to facilitate the task of the modern school; but he does not accept them, and admits only that one might have recourse to the indication of the point of articulation for the most difficult sounds in lip-reading.

Let us now see what the author says in regard to the new phonomimic expedient of Forchhammer. (See *THE ASSOCIATION REVIEW*, December, 1902, page 413-423):

“We teachers of the Deaf are in duty bound to examine with great care and without prejudice, the worth of every new expedient proposed for facilitating the acquisition and the understanding of language by our pupils. Therefore one must not neglect the new expedient of Forchhammer, the zealous director of the Nyborg institute, and still more as he wishes to demonstrate that with his oral and manual system one can succeed in instructing every species of deaf-mute by means of the oral method. As this system has already been published, the educators are acquainted with it. The future will show whether it corresponds with the object proposed. I, if I may be allowed to state my personal opinion, believe that it is simply a question of another manual alphabet, and hence in the photographs of the hand there is nothing new. I doubt also if the colleagues of

Copenhagen will find it convenient to change the old manual alphabet for the new system. Until I shall have had the personal experience to convince me of the superiority of the new system, I shall prefer the expedient used at Bruhl, which is to count the syllabic parts of the word to the Deaf of weak minds."

"We do not mean to say by this, however, that all the educators of the Deaf who shall apply the new system must necessarily come to the same conclusion; especially as Forchhammer affirms that he has already proved it practically and publicly in the Institute at Nyborg."

II. THE PUBLIC SCHOOLS FOR THE DEAF IN HAMAR, AND THE ABSOLUTE SEPARATION OF THE FEEBLE-MINDED.

Passing on to Norway, Mr. Stelling tells us of the public schools of Hamar, and the separation which they make there between the weak-minded Deaf and those endowed with greater intelligence. This was possible after the Congress of 1884 for the education of the abnormal in Scandinavia, that is when they were able to organize the schools upon the basis of a resolution, unanimously accepted, of the Principal Blomkvist of Orebo (Sweden).

"To obtain a satisfactory result in the instruction of the Deaf in a country, it is necessary that they be divided, according to their intelligence and their ability in pronouncing and in speaking, into three different groups. This division should be obtained in every country in consideration of its special conditions.

Denmark, as we have seen, provides for this in admitting all the Deaf in one sole institute, making afterwards the necessary subdivisions; Sweden provides for it by means of a division in each province (7 districts with 9 public institutions). The other three schools with a more restricted number of pupils, which are included in the total of 12 Swedish institutions, are designed for the weak-minded blind Deaf-mutes.

In Norway a fixed organization was not possible until 1887 in consequence of a Royal decree. It was established that there should be five schools, and of these two for the pupils of the group A, two of those of the group B, one of those of the groups

C and D together. From two of the districts where the Deaf of the country are admitted, they send the weak-minded Deaf to the common school of Hamar, where the pupils of the groups C and D live together, but are instructed separately.

In a contrary manner from what they do in Denmark, in Norway the division of the children is made exclusively upon the proposal of the two principals of the institutes of admission. If, in order to give an example of this operation, we take into consideration 189 children between the years 1891 and 1899 (exception being made for the year 1893, in which year no admission was made, and this happens every 8 years), we have this result; 40 per cent. were sent to the group A, $38\frac{1}{2}$ per cent. were sent to the group B, and $21\frac{1}{2}$ per cent. to the Institute of Hamar for the groups C and D. This percentage combined with that had in Denmark is the same as that given by Stelling himself in his pamphlet: "*Die Fursorge fur die schwachbegabten Kinder.*" (The Care of Feeble-minded Children).

It seems however that the present organization in Norway is not satisfactory in respect to the condition of the country (extent, journeys, period of admission, etc.), and therefore the Government would not be adverse to adopting a new plan, if first the Principals of the five different institutes could agree upon one. Some of them however find the present organization quite right, and indeed they wish that the division into groups of the pupils should correspond with an equal variety of institutes, because they hold that a division in the same school will not guarantee efficacious and profitable work.

The Principal of the Institute of Hamar insists upon the contrary: 1. that with absolute separation the stimulus of emulation is lost for the weak-minded Deaf, and therefore they remain seriously injured in their intellectual development; 2. that the teachers who are obliged to work for the feeble-minded alone soon become discouraged from the constant repetitions, and from the unsatisfactory results of their labour, and lose in a short time all joy in their work; 3. that those pupils who have to come from distant parts of the country shorten their vacations too much.

The Principal of the Institute of Christiania affirms on his part: 1. that also the teachers in the school of admission have too hard a work to do. Every year they must teach at least three classes in articulation, and they have to contend with great difficulties in the educational part with children who come from miserable home conditions; 2. that of the five existing institutes, only the two schools of admission are able to have really expert teachers of articulation, who also in the further progress of teaching care for the mechanical speech, and try to perfect it; 3. that it is impossible after only one year's trial to make a just division of the pupils, as the mechanical ability of speech cannot be such as to give a sure measure of their capacity for further instruction; 4. then it is also a cruelty to take children away, after only one year, from the Institute to which they are accustomed, and place them in entirely strange surroundings.

As we see, the arguments for and against have a great pedagogical and didactical importance. Mr. Stelling takes them in examination, comparing them with the opinions of other educators in regard to these various questions on the selection of the Deaf according to their intelligence. He also alludes to the question discussed lately by several of the colleagues, "as to the necessity of limiting the scholastic program in favor of the physical education, and of industrial instruction," but speaks of it afterwards *ex professo* in paragraph III, as we shall see later.

Mr. Stelling has examined on the spot the results of the schools of Hamar, in regard to the teaching, with the purpose of making our position clear as to the mimic, to the objective method, and as to natural gestures in the instruction of the weak-minded Deaf.

We must rejoice especially that at Hamar they urge the teaching of the spoken word as much as possible, and only renounce it in desperate cases in favor of writing. The same is said of the objective teaching, in which they have recourse to models and figures only when it is not possible to show the objects in nature; we must also note that in order to impress more strongly upon the minds of the children the things explained in the lesson, they oblige them to write them, trusting to their memory for the task to be done at home. In order to

accomplish this more securely, they make one of the pupils write on the black-board every sentence that has been made or said in the lesson. They also begin early to use (3rd year) the special books for reading and language.

Mr. Stelling found however that they are too much afraid of natural gestures, and consequently the teaching is somewhat dry and cold. Neither can he imagine, for example, how it is possible to give religious instruction to the weak-minded Deaf without the aid of natural signs.

III. THE PRACTICAL (MANUAL) TEACHING.

In this article the author speaks of the teaching of manual labor and of its educative value for the Deaf. He remarks that in the countries of the north it finds a place in the program everywhere, while in the German schools it has not yet found its place, perhaps because they do not yet appreciate its just value. This is difficult to understand in America, where manual training makes a part of every program of instruction, from the elementary schools to the colleges and universities.

IV. BOARDING OR DAY-SCHOOLS ?

"This question," says Mr. Stelling, "is of the greatest importance for the weak-minded Deaf, in regard to their education." All the educators, even in Germany, who have any experience in this, now agree that they cannot succeed in this task without the institution of the boarding-school. Mutschmann and Barth, although advocates of the day-school, call attention to the children who are weak in body and need to have special care as to diet; but this can only be given in a boarding-school. In Denmark and Norway they are of the same opinion as to this. However the form of the institutions for the Deaf in the future will be a mixed one, that is a combination of day and boarding school, as we find already in Norway.

As to the difficulties which may arise between the teachers and the Principal of an Institute, Mr. Stelling reminds us that agreement between them is the most important condition for the final result of the work.

The general conclusions of the author upon the question as to the method to be used for producing the surest effect, and of the manner of organizing the school, are as follows:

I. IN REGARD TO THE METHOD.

Also with the weak-minded Deaf of groups C and D one should insist as much as possible upon the application of the oral method, but one should not exclude the mimic representation, nor natural gestures from teaching; and in regard to the education of these children, one should give the greatest importance and the amplest development to manual work; from this it follows that:

II. IN REGARD TO THE ORGANIZATION,

for these pupils there must be an absolute separation from those more gifted with intelligence—groups A and B—for whom the pure oral method is necessary and sufficient, and therefore they should be sent to special institutes; but a further separation of place between the pupils of the groups A and B is not necessary.

THE WISCONSIN ROUND TABLE.

MILWAUKEE, WISCONSIN, DECEMBER 29, 1902.

AN OBSERVER'S NOTES.

The State Teachers' Association of Wisconsin has a section consisting of those persons interested in the instruction of the deaf. The section held a meeting last year, and has just closed the second session, having present a good body of the fifty teachers in the state, who participated chiefly in the presentation of papers, and the section will hereafter doubtless take a more definite place in the line of discussion of papers read.

The State Inspector of Schools for the Deaf, W. D. Parker, presided, and a special feature of interest was the exemplification of the instruction afforded Miss Eva Halliday by her teachers, Hypatia Boyd and Elsie Steinke. Mr. Parker reported that there were, during the past school year, 428 deaf (minors chiefly) in the 18 day, and 1 state, schools; that 33 lady teachers directed the oral work in the 18 day schools, and that some 19 male and female teachers taught the inmates at the state school,—over 140 of whom were under instruction for speech. The inspector announced that his annual report of date June 30, 1902, will be mailed to the teachers within a few days.

The main topic of consideration was "The Instruction of the Deaf in Language," and the several papers of the teachers approached the subject from many points of view that, in the aggregate, afforded a strong review of the method in the state. The Inspector was of the opinion that a creditable state of harmony exists among the teachers in the state, in spite of the variety of methods of instruction, and that language has a large measure of encouragement coming through the zeal of the teachers in the lines in which individually they work.

State Superintendent-elect, C. P. Cary, late Superintendent of the state school during one year, stated that it was fairly manifested in his observation that the highest intellectual stim-

ulus comes through speech for the deaf, and that language itself is promoted by the present methods of procedure at the state school,—which may be ranked as under the “combined method.” That reading constitutes large valuable stimulus for improvement of the forms of language for the deaf.

The paper of Miss Hypatia Boyd, of the state school, concerning the early instruction of the deaf-blind girl, Eva Halliday, stated that this girl, fifteen years old, entered the school last February, having no language, but a bright mind and affectionate soul that was evidently pleading for release from the world of darkness and ignorance. Miss Boyd used finger spelling in her instruction, and the girl seemed to realize that all things had names and desired to spell on the hand continuously. The child’s zeal was such that sentences were introduced early. The girl elicited the interest of William Wade, of Oakmont, at an early date, and received from him a Braille writer, which she mastered in connection with the sign language. At this date, Eva has over five hundred words in her vocabulary for use on a Remington typewriter, also a gift of Mr. Wade, and she prints the same list in Braille and reads it after the manner of the blind. The child is reported to receive gymnastic exercises with interest; she engages in all sports with other deaf children who are not blind, and is alert in every physical and mental way that the teacher can desire.

Miss Elsie Steinke, who became the teacher in speech of Eva in September, gave an interesting account of her procedure, which is substantially after the method employed elsewhere with the deaf-blind, and at a later moment each of the teachers, Misses Boyd and Steinke, exemplified all of the work with Eva present excepting the Remington writer process.

A paper by Miss Alice Robie, of the Ashland day school, was read by Miss Gardner, of Appleton, and stated that the essential steps which are taken for language must be addressed to the eye and to the touch rather than to the ear, and that this fact must be kept constantly in view in order that a comparative lack of spontaneous exercise of the learner shall find compensation in the degree of intensity with which repetition, through immediate instruction, is promoted.

Miss Gussie Greener, teacher in the day school at Rhineland, said, under the sub-title of "Action Work," that such work appeals to the deaf in natural ways, in that it is in conformity to the child to "do something," and the doing of something that is spontaneous leads to the ready doing of the things of school as writing, etc. In all this work, the child is taught the word that expresses the action, and the action itself affords an occasion for an amount of exercise that enables the teacher to release the child from the sum-mutisms which might otherwise continue. Out of general bodily action comes a sharpening of perceptive so that "lip-reading" is to most children a comparatively easy process.

M. Stella Flatly, teacher of the day school at Green Bay, in presenting the sub-topic "The Journal," remarked that the Journal secured spontaneous expression of the child; that at the speech lesson where the journal is admissible the child speaks the sentence, and each sentence is written on the slates by some pupil as it is spoken by another. When all the sentences are written, they are repeated by all the children, and each is called to substitute a noun for a pronoun, or the contrary, observing the change of form of pronouns with a view to denote person. On the succeeding day, questions are asked concerning that work in which children participate, and an exhibition of the journal comes easily to general sentential forms.

Elsie M. Steinke, of the state school, speaking from her notes concerning "Correlations with a View to Language," made strong points on lines well understood by teachers of the deaf, giving conclusive evidence that the relations in which words or facts stand to other facts and words, are made for extending the powers of the child concerning the content of the word or language.

Carrie H. Archibald, teacher of the day school at Oshkosh, answered the question,—“What do you consider the best means for enabling your pupils to acquire language in the next five years?”

Miss Archibald specified reading for third grade pupils, who are interested in *Lights to Literature*, book 2, and similar publications. Selections from the best poems are a help in the ac-

quisition of language,—the poetic form affords a variety. History, biography and mythology offer excellent fields for composition work, and lead to a literary sense. Miss Archibald's paper is along the line of utterance of the pedagogues of repute concerning work in language with the deaf.

The paper of Almira I. Hobart, of the state school, entitled "A Few Points in Everyday English," was, in the necessary absence of the writer, read by Miss Steinke, also of that school.

Miss Hobart affirms that it is an ever recurring problem to the teacher to give the deaf child a fair knowledge of language. After minor sentences are familiar, systematic, rapid advancement will come through drill and the recitation of natural facts told in familiar form. The child should be abundantly talked to, both in and out of the school room, in clear but simple English. He should have assistance in expressing himself in speech, dependent of course upon his indicated weakness in the present emergency. The teachers can help by placing upon the wall slates the difficult words and idioms that the child may, by repetition, master them. The child will thus be placed in an atmosphere of language, not of mere words but of sentences, all of which requires painstaking care. The children should be surrounded with books and papers, whose language is appropriate, yet similar to that which his hearing brothers have. The supervision should be constant; interesting stories should be abundant, etc.

Thomas Hagerty, physical trainer at the state school, signed a paper to the teachers, which was translated into speech by an associate teacher. Mr. Hagerty made a definite plea for physical training for the deaf, both on account of general needs that people have for exercise, and for the special purpose of final self activity that are realized by those who deal with the deaf.

A synopsis of this excellent paper is not given, owing to lack of immediate relevance to the main topic of the day.

The exercises closed with Eva Halliday's exemplification, and the election of Miss Frances Wettstein, principal of the day school at Milwaukee, to the chairmanship of the section, for the administration of the work next year.

MY LIST OF HOMOPHENOUS WORDS.

EMMA SNOW, NEOSHO FALLS, KANSAS.

It was through some vexatious mistakes which I made in conversation with members of my family, because of the similarity in appearance between two or more words, that gave me the thought of starting a list of homophenous words.

I believed that the list could be made available for general use by lip-readers, as well as for those special students for whom it is chiefly intended, if it were made full and complete; but it did not seem to me at the start that I could go very far in the work, yet the more I enlarged the list the more the idea developed, and the insight into the movements of my lips and tongue became much keener, enabling me to use more effectively my judgment and ability in the ultimate selections.

I am indebted to Mr. F. W. Booth, the editor of THE ASSOCIATION REVIEW, for his kind criticism and valuable suggestions in regard to the arrangement of the words, and I wish to make acknowledgment of the credit due him in this work.

I have finally completed the twenty-six lists, which are arranged in alphabetical order, and in cross-reference style. Every word in its turn in the first column can be readily found, as people will wish to use the lists as they do a dictionary. There are more words that look alike than there are words that sound alike; crane, crate, grade, grain looking alike to the eye, and grate, great being the same to the ear, hence all the words in the lists are more or less difficult for speech-readers to distinguish by the eye.

In this arrangement there is no connection to help the mind. Any deaf person who understands the English language thoroughly is quick of thought to determine in which sense or significance a word is used. For instance: "First the blade, then the ear; after that, the full corn in the ear." There would be no sense in this quotation, if written in words of similar ap-

pearance on the lips, thus: *Versed, thee, plate, thin, thec, hear; after than, thec, full cord it thee here.* But in cases, some of these words might be uttered when we cannot very well help seeing them as looking like other words.

There are numerous words (not included in the lists) which are entirely dissimilar, yet are very easily mistaken for other words in rapid speech, for instance: one of my deaf friends, who is highly educated and an expert lip-reader, told me last Spring of one of the ludicrous blunders which she had made. Her mother was reading about a car-load of *mixed-paints*. She wondered that such a quantity of *mince-meat* was shipped at that time in the year. And I recently made the mistake of supposing that my sister said to me, "*Wipe your face,*" when she had remarked instead, "*Wrapper fades.*" The above words are totally unlike, and it is not always possible by the clearest estimation to decide which word or phrase is right.

There are no two mouths alike in the world. If they were all what we call "remarkably good mouths," speech-reading would not be difficult of comprehension, but every mouth has its own distinctive manner of expression. Some move their lips with beautiful precision, and some open their jaws with great rapidity, which fills me with hopeless perplexity, yet even such a method may be very helpful to some speech-readers who are accustomed to its peculiarities. The greatest difficulties are found in distinguishing the following consonants, t, d, n, l, formed by placing the tip of the tongue against the front teeth, as tot, don, not, lot; p, b, m, produced by lip-sounds, as bale, male, pale; f, v, ph, also produced by lip-sounds, as file, vile, phial; s, c, z, formed by pressing the teeth, as seal, ceil, zeal; c, g, k, which cannot be seen at the beginning of a word produced by throat-sounds, as cap, good, king; ch, sh, j, at the beginning of a word, produced by hissing sounds, as chop, shop, job; and q, w, which have the same appearance on the lips, when pronounced in a word, as quail, whale. In my experience the vowels are readily apprehended, and I have used this troublesome set of consonants as the basis of my lists.

Although I have had no training for this special work, yet I believe if the homophenous words in each line were formed

in phrases and sentences by the deaf learner, it would be of very great assistance. After he has mastered the elementary sounds, the practice of these exercises would certainly forward final success in considering the context, and being able to decide which word of the several possible words is in any instance the one actually used. I believe also that those who do not immediately apprehend the similarity between the given words in any instance, will soon discover it for themselves by repeating the words before a mirror or having them pronounced by some one without voice. The art of lip-reading is like any other commendable achievement. It is a very slow process and requires great patience and persistence. But it is full of intense interest every step of the way—and the benefits it yields to every one concerned out-measure in many ways the effort required in order to command them.

HOMOPHENOUS WORDS.

a.	āye.	hay,	aid,	aint,	ate,
abase,	amaze,	apace,		eight,	hade,
abate,	amain,				hate,
abed,	abet,	amend,	ail,	ale,	hail,
abet,	abed,	amend,			hale,
abound,	about,	amount,	aim,	ape,	
about,	abound,	amount,	aint,	aid,	ate,
abscess,	absence,			eight,	hade,
absence,	abscess,				hate,
abuse,	amuse,		air,	e'er,	ere,
abyss,	amiss,			hair,	hare,
ace,	haze,				heir,
ache,	egg,		aisle,	I'll,	isle,
act,	hacked,	hanged,	ale,	ail,	hail,
add,	at,	had,			hale,
	hand,	hat,	alight,	aligned,	anight,
addle,	handle,		aligned,	alight,	anight,
adds,	adze,		all,	awl,	hall,
adieu,	ado,	anew,			haul,
ado,	adieu,	anew,	allowed,	aloud,	
adze,	adds,		aloud,	allowed,	
aged,	agent,		altar,	alter,	halter,
agent,	aged,		alter,	altar,	halter,
aground,	around,		alum,	gallop,	galop,
ah,	ha,		always,	hallways,	

am,	ham,	hap,	art,	hard,	hart,
amain,	abate,				heart,
amaze,	abase,	apace,	as,	ass,	has,
amber,	hammer,	hamper,	ascend,	ascent,	assent,
amble,	ample,	apple,	ascent,	ascend,	assent,
amend,	abed,	abet,	ash,	hash,	
amiss,	abyss,		ashen,	hatchet,	
amount,	abound,	about,	asp,	hasp,	
ample,	amble,	apple,	ass,	as,	has,
amuse,	abuse,		assent,	ascend,	ascent,
an,	and,	ant,	at,	add,	had,
		aunt,		hand,	hat,
anchor,	angor,		ate,	aid,	ain't,
and,	an,	ant,		eight,	hade,
		aunt,			hate,
anew,	adieu,	ado,	attained,	attaint,	
anger,	hanger,		attaint,	attained,	
angle,	ankle,	haggle,	auger,	augur,	
angor,	anchor,		aught,	awed,	ought,
anight,	alight,	aligned,	augur,	auger,	
animal,	cannibal,		awk,	hawk,	
ankle,	angle,	haggle,	aunt,	an,	and,
answer,	cancer,			ant,	hand,
ant,	an,	and,	auntie,	handy,	
		aunt,	averred,	avert,	
apace,	abase,	amaze,	avert,	averred,	
ape,	aim,		away,	aweigh,	
apple,	amble,	ample,	awe,	haw,	
arbor,	harbor,		awed,	aught,	ought,
arc,	ark,	hark,	aweigh,	away,	
arch,	harsh,		awful,	hovel,	
ardent,	hardened,		awl,	all,	hall,
ark,	arc,	hark,			haul,
arm,	harm,	harp,	axe,	hacks,	hags,
arms,	harps,				hangs,
around,	aground,		aye,	eye,	hie,
arrow,	harrow,			high,	I,
			aye,	a,	hay,
babe,	maim,		bad,	bade,	bat,
back,	bag,	bang,		mad,	mat,
	bank,	pack,	bade,	pad,	pat,
		pang,		bad,	bat,
				mad,	mat,
				pad,	pat,

badge,	batch,	match,	banner,	banter,	batter,
		patch,		manner,	matter,
bag,	back,	bang,	banter,	banner,	batter,
	bank,	pack,		manner,	matter,
		pang,	bar,	mar,	par,
baggage,	package,				parr,
bah,	ma,	pa,	barb,	marm,	
bail,	bale,	mail,	hard,	barn,	pard,
	male,	pail,			part,
		pale,	bare,	bear,	mare,
bait,	bate,	bayed,		pair,	pare,
	made,	maid,			pair,
	mate,	paid,	bargain,	market,	parquet,
		pate,	barge,	march,	marge,
baize,	base,	bass,		marsh,	parch,
	bays,	mace,	bark,	barque,	mark,
	maize,	maze,			park,
	pace,	pays,	barley,	parley,	
bake,	make,		barn,	bard,	pard,
balance,	palance,				part,
bald,	bawled,	malt,	baron,	barren,	
bale,	bail,	mail,	barque,	bark,	mark,
	male,	pail,			park,
		pale,	barren,	baron,	
ball,	bawl,	mall,	bars,	mars,	parse,
	maul,	pall,	barter,	martyr,	
ballot,	mallet,	palate,	base,	baize,	bāss,
	palette,	pallet,		bays,	mace,
		pallid,		maize,	maze,
				pace,	pays,
balm,	palm,		basin,	mason,	
ban,	band,	man,	bask,	basque,	mask,
		pan,			masque,
band,	ban,	man,	basket,	mascot,	
		pan,	basque,	bask,	mask,
bandage,	manage,				masque
bane,	main,	mane,			
	pain,	pane,	bass,	mass,	pass,
bang,	back,	bag,	bāss,	baize,	base,
	bank,	pack,		bays,	mace,
		pang,		maize,	maze,
				pace,	pays
bangle,	mangle,			paste,	
banish,	mannish,		baste,	bad,	bade,
bank,	back,	bag,	bat,	mad,	mat,
	bang,	pack,		pad,	pat,
		pang,			

batch,	badge,	match,	beau,	bow,	mow,
bate,	bait,	patch,	beck,	beg,	peck,
	made,	bayed,			peg,
	mate,	maid,	bed,	bet,	met,
		paid,	bee,	be,	pet,
bath,	path,	pate,			me,
batten,	patten,		beech,	beach,	pea,
batter,	banner,	banter,	been,	bin,	peach,
	manner,	matter,	beer,	bier,	pin,
battle,	paddle,			peer,	mere,
bawl,	ball,	mall,	bees,	peace,	pier,
	maul,	pall,			peas,
bawled,	bald,	malt,	beet,	bead,	piece,
bay,	bey,	may,		mead,	beat,
		pay,		meed,	meat,
bayed,	bait,	bate,		mete,	meet,
	made	maid,	beg,	beck,	peat,
	mate,	paid,			peck,
		pate,			peg,
bays,	haize,	base,	begone,	beyond,	
	bāss,	mace,	belate,	belayed,	
	maize,	maze,	belayed,	belate,	
	pace,	pays,	bell,	belle,	mell,
be,	bee,	pea,			pell,
		me,	belle,	bell,	mell,
beach,	beech,	peach,			pell,
bead,	beat,	beet,	bellow,	mellow,	
	mead,	meat,	belt,	melt,	pelt,
	meed,	meet,	bend,	bent,	meant,
	mete,	peat,		mend,	penned,
beading,	beating,	meeting,	bent,	bend,	pent,
beak,	meek,	peak,		mend,	meant,
	peek,	pique,			penned,
beam,	peep,		berry,	bury,	pent,
bean,	mean,	mien,	berth,	birth,	merry,
beans,	means,		beseech,	besiege,	mirth,
bear,	bare,	mare,	besiege,	beseech,	
	pair,	pare,	best,	pest,	
		pear,	bet,	bed,	met,
beat,	bead,	beet,			pet,
	mead,	meat,	bey,	bay,	may,
	meed,	meet,			pay,
	mete,	peat,	beyond,	begone,	
beating,	beading,	meeting,	bib,	pimp,	pip,

bid,	bit,	mid,	blaze,	place,	plays,
	mitt,	pit,	bleat,	bleed,	plead,
bidden,	bitten,	mitten,			pleat,
bide,	bite,	might,	bled,	blend,	blent,
	mite,	pied,	bleed,	bleat,	plead,
bids,	bits,	midst,			pleat,
bier,	beer,	mere,	blench,	pledge,	
	peer,	pier,	blend,	bled,	blent,
big,	mink,	pick,	blent,	bled,	blend,
	pig,	pink,	blessed,	pleasant,	
bile,	mile,	pile,	blew,	blue,	
bilk,	milk,		blight,	blind,	plied,
bill,	mill,	pill.			plight,
billed,	build,		blind,	blight,	plied,
billet,	millet,	pillet,			plight,
billion,	million,	pillion,	bloat,	blowed,	blown,
billow,	minnow,	pillow,	blood,	blunt,	
bin,	been,	pin,	bloom,	plume,	
bind,	mind,	pint,	blot,	plod,	plot,
birch,	merge,	purge,	blouse,	plows,	
		perch,	blowed,	bloat,	blown,
bird,	burn,	pert,	blown,	bloat,	blowed,
birth,	berth,	mirth,	blubber,	plumper,	plumper,
bit,	bid,	mid,	blue,	blew,	
	mitt,	pit,	blunder,	plunder,	
bitch,	midge,	pinch,	blunt,	blood,	
		pitch,	blurred,	blurt,	
bite,	bide,	might,	blurt,	blurred,	
	mite,	pied,	blush,	plunge,	plush,
bits,	bids,	midst,	boar	bore,	more,
bitten,	bidden,	mitten,		pore,	pour,
black,	blank,	plank,	board,	bored,	mourned,
		plaque,	boarder,	mourner,	porter,
blackened,	blanket,		boast,	most,	post,
bladder,	platter,		boat,	bode,	moat,
blade,	plain,	plane,		mode,	mote,
	plate,	played,			mowed,
bland,	plaid,	plait,	bob,	mob,	mop,
	plan,	plant,			pop,
		plat,	bode,	boat,	moat,
blank,	black,	plank,		mode,	mote,
		plaque,			mowed,
blanket,	blackened,		bodice,	bodies,	
			bodies,	bodice,	
			bog,	mock,	pock,

bold,	bolt,	bowled,		pound,	pout,
	mold,	polled,	bōw,	beau,	mow,
bole,	boll,	bowl,	bower,	power,	
	mole,	pole,	bowl,	bole,	boll,
		poll,		mole,	pole,
boll,	bole,	bowl,			poll,
	mole,	pole,	bowled,	bold,	bolt,
		poll,		mold,	polled,
bolt,	bold,	bowled,	bow-wow	pow-wow	
	mold,	polled,	box,	pox,	
bomb,	bump,	mum,	boys,	poise,	
	mump,	pump,	brace,	brays,	braze,
		pup,		praise,	prays,
bond,	bought,	pawned,	brad,	bran,	brand,
		pond,			brat,
bone,	moan,	mown,	brag,	prank,	
		pone,	braid,	brain,	brayed,
boodle,	poodle,			prate,	prayed,
boon,	mood,	moon,	brain,	braid,	brayed,
boor,	moor,	poor,		prate,	prayed,
boot,	moot,	mute,	brake,	break,	
booty,	beauty,	moody,	brand,	brad,	bran,
bore,	boar,	more,			brat,
	pore,	pour,	brat,	brad,	bran,
bored,	board,	mourned,			brand,
born,	borne,	morn,	brawn,	broad,	brought,
borne,	born,	morn,	bray,	pray,	prey,
borrow,	morrow,		brayed,	braid,	brain,
boss,	moss,			prate,	prayed,
bother,	pother,		brays,	brace,	braze,
bottle,	model,	mottle,		praise,	prays,
bough,	bow,	mow,	braze,	brace,	brays,
boughs,	mouse,			praise,	prays,
bought,	bond,	pawned,	breach,	preach,	
		pond,	bread,	bred,	
bounce,	pounce,		break,	brake,	
bound,	bout,	bowed,	bred,	bread,	
	mound,	mount,	breeches,	bridges,	
	pound,	pout,	brevet,	prevent,	
bout,	bound,	bowed,	brewed,	brood,	bruit,
	mound,	mount,		brute,	prude,
	pound,	pout,			prune,
bow,	bough,	mow,	brews,	bruise,	
bowed,	bound,	bout,	bribe,	prime,	
	mound,	mount,			

brick,	brig,	bring,	buckle,	bungle,	
	brink,	prick,	bud,	bun,	but,
	prig,	prink,		butt.	mud,
bridal,	bridle,				pun,
bride,	bright,	brined,	budge,	much,	mush,
	pride,	pried,	buff,	muff,	puff,
bridges,	breeches,		bug,	buck,	bung,
bridle,	bridal,			bunk,	monk,
brig,	brick,	bring,		muck,	mug,
	brink,	prick,		pug,	punk,
	prig,	prink,	buggy,	muggy,	
bright,	bride,	brined,	build,	billed,	
	pride,	pried,	bull,	pull,	
brim,	prim,		bullet,	pullet,	
brined,	bride,	bright,	bumble,	bubble,	mumble,
	pride,	pried,	bump,	bomb,	mum,
bring,	brick,	brig,		mump,	pump,
	brink,	prick,			pup,
	prig,	prink,	bun,	bud,	but,
brink,	brick,	brig,		butt,	mud,
	bring,	prick,			pun,
	prig,	prink,	bunch,	munch,	punch,
broad,	brawn,	brought,	bundle,	muddle,	puddle,
brogue,	broke,		bung,	buck,	bug,
broke,	brogue,			bunk,	monk,
brood,	brewed,	bruit,		muck,	mug,
	brute,	prude,		pug,	punk,
		prune,	bunk,	buck,	bug,
brought,	brawn,	broad,		bung,	monk,
brow,	prow,			muck,	mug,
browed,	brown,	proud,		pug,	punk,
brown,	browed,	proud,	buried,	merit,	
brows,	browse,		burn,	bird,	pert,
browse,	brows,		bury,	berry,	merry,
bruise,	brews,		burr,	purr,	
bruit,	brewed,	brood,	bus,	buzz,	muss,
	brute,	prude,			pus,
		prune,	bush,	push,	
brute,	brewed,	brood,	bust,	must,	
	bruit,	prude,	bustard,	mustard,	mustered,
		prune,	bustle,	muscle,	mussel,
bubble,	bumble,	mumble,		muzzle,	puzzle,
buck,	bug,	bung,	but,	bud,	bun,
	bunk,	monk,		butt,	mud,
	muck,	mug,			pun,
	pug,	punk,			

butt,	bud, but,	bun, mud, pun,	buys, buzz,	mice, bus,	pies, muss, pus,
butter, button, buy,	mutter, mutton, by, pi,	my, pie,	by,	buy, pi,	my, pie,
cab,	camp, gab,	cap, gam, gap,	cap,	cab, gab,	camp, gam, gap,
cable, cage, cairn,	gable, gage, card, guard,	cart, yard, yarn,	cape, capital, capitol, card,	came, capitol capital cairn, guard,	game, cart, yard, yarn,
call, calm, came, camp,	gall, cob, cape, cab, gab,	gob, game, cap, gam, gap, cant, cat, gad,	carp, carpet, carrot, cart,	garb, garment. carot, cairn, guard,	garret, card, yard, yarn,
can,	canned, can't		case, cast, caste, caster, castor, cat,	gaze, caste, cast, castor. caster, can, cant,	canned, can't, gad,
cancer, candle, cane,	answer cattle, gain,	gait, gate, cant, cat, gad,	catamount, cattle, caught,	gadabout candle, cod, cot, got, gauze, gave, scenes, sees, seal, sell, seller, sense,	con, god, yacht,
canned.	can, can't,		cause, cave, cease,		seas, seize, zeal,
cannibal, cannon, canon, cant,	animal, canon, cannon, can, can't,	canton, canton, canned, cat, gad, canned, cat, gad, canon,	ceil, cell, cellar, cense,		
can't,	can, cant,				
canton, canvas, canvass,	cannon, canvass, canvas,				

censor,	sensor,		chilled,	jilt,	
censual,	sensual,		chilling,	shilling,	
cent,	said,	scent,	chin,	chit,	gin,
	send,	sent,		jin,	shin,
		set,	chink,	chick,	jig,
center,	setter,		chip,	jib,	ship,
cere,	sear,	seer,	chit,	chin,	gin,
cereal,	serial,			jin,	shin,
cession,	session,		chock,	jog,	shock.
chafe,	shafe,		choice,	joys,	
chaffed,	shaft,		choir,	quire,	wire,
chain,	jade,	shade,	choke,	joke,	
chair,	share,		choler,	collar,	
chamois,	shabby,		choose,	chews,	juice,
chap,	champ,	jam,			shoes,
	jamb,	sham,	chop,	job,	shop,
chapel,	shamble,		chord,	cord,	corn,
charm,	sharp,		chore,	shore,	
charred,	chart,		chose,	shows,	
chart,	charred,		chub,	chum,	jump,
chased,	chaste,		chuck,	chunk,	jug,
chaste,	chased,				shuck,
chat,	shad,		chuckle	juggle,	jungle,
chatter,	shatter,		chum,	chub,	jump,
chaw,	jaw,	pshaw,	chunk,	chuck,	jug,
cheap,	cheep,	sheep,			shuck,
cheat,	sheet,		churl,	churn,	
cheating,	sheeting,		churn,	churl,	
cheek,	sheik,		chute,	chewed,	June,
cheep,	cheap,	sheep,		jute,	shoot,
cheer,	jeer,	shear,	cider,	sider,	
		sheer,	cinque	sick,	sing,
cherry,	sherry,			sink,	zinc,
cherub,	cherup,		cite,	side,	sighed,
cherup,	cherub,			sight,	signed,
chest,	jest,				site,
chew,	shoe,	shoo,	clabber,	clammer,	clamour,
chewed,	chute,	June,		clapper,	glamour,
	jute,	shoot,	clack,	clang,	clank,
chews,	choose,	juice,	clam,	clamp,	clap,
		shoes,	clammer,	clabber,	clamour,
chick,	chink,	jig,		clapper,	glamour,
chide,	shied,	shine,	clamp,	clam,	clap,
chief,	sheaf,	sheave,	clan,	clad,	glad,
chill,	Jill,				gland,

clang,	clack,	clank,	cog,	cock,	gong,
clank,	clack,	clang,	coil,	coin,	
clap,	clam,	clamp,	coin,	coil,	
clapper,	clabber,	clammer,	cold,	colt,	gold,
	clamour,	glamour,	collar,	choler,	
class,	glass,		colonel,	kernel,	
cleaned,	gleaned,	gleet,	colt,	cold,	gold,
clew,	clue,	glue,	comb,	cope,	
click,	cling,	clink,	come,	cub,	cup,
climb,	clime,				gum,
clime,	climb,		commune,	commute,	compute,
cling,	click,	clink,	commute,	commune,	compute,
clink,	click,	cling,	compute,	commune,	commute,
clip,	glib,		con,	caught,	cod,
clipper,	glimmer,			cot,	god,
clock,	clog,			got,	yacht,
clod,	clot,		concede,	conceit,	
clog,	clock,		conceit,	concede,	
close,	clothes,		concerned,	concert,	
clot,	clod,		concert,	concerned,	
clothes,	close,		condemned,	contemned,	contempt,
cloud,	clout,	clown,	cone,	coat,	code,
clout,	cloud,	clown,		cote,	goad,
clown,	cloud,	clout,			goat,
club,	clump,	glum,	conferred,	convert,	
cluck,	clung,		confide,	confined,	
clue,	clew,	glue,	confined,	confide,	
clump,	club,	glum,	confounded,	unfounded,	
clung,	cluck,		contemned,	condemned,	contempt,
coal,	goal,		contempt,	condemned,	contemned,
coarse,	course,		contend,	content,	
coast,	ghost,		content,	contend,	
coat,	code,	cone,	convert,	conferred,	
	cote,	goad,	coo,	cue,	queue,
		goat,	cool,	ghoul,	
cob,	calm,	gob,	coon,	cued,	cute,
cobble,	gobble,		cope,	comb,	
cobbler,	gobbler,		copies,	coppice,	
cock,	cog,	gong,	coppice,	copies,	
cockle,	goggle,		cord,	chord,	corn,
cod,	caught,	con,	corn,	chord,	cord,
	cot,	god,	core,	corps,	gore,
	got,	yacht,	corps,	core,	gore,
code,	coat,	cone,	cot,	caught,	cod,
	cote,	goad,		con,	god,
		goat,		got,	yacht,

cotton,	gotten,		cribble,	crimple,	cripple,
couch,	gouge,		cried,	gride,	grind,
could,	good,		crime,	grime,	gripe,
council,	counsel,		crimpage,	cribbage,	
counsel,	council,		crimple,	cribble,	cripple,
count,	gowned,	gout,	cripple,	cribble,	crimple,
course,	coarse,		crypt,	cribbed,	
court,	gourd,		crook,	grog,	
cousin,	cozen,		crone,	groan,	grown,
cozen,	cousin,		croon,	crude,	
crab,	cram,	cramp,	crow,	grow,	
	grab,	gramme,	crowd,	crowned,	grout,
crack,	crag,	crank,	crows,	gross,	grows,
craft,	graft,		crude,	croon,	
crag,	crack,	crank,	cruel,	crewel,	gruel,
cram,	crab,	cramp,	cruise,	crews,	cruse,
	grab,	gramme,	crumb,	grub,	grum,
cramp,	crab,	cram,	crumble,	crumple,	grumble,
	grab,	gramme,	crumple,	crumble,	grumble,
crane,	crate,	grade,	crunch,	crush,	crutch,
	grain,	grate,			grudge,
		great,	cruse,	crews,	cruise,
crank,	crack,	crag,	crutch,	crunch,	crush,
crape,	grape,				grudge,
crate,	crane,	grade,	cry,	rye,	wry,
	grain,	grate,	cub,	come,	cup,
		great,			gum,
crater,	greater,		cud,	cut,	gun,
craze,	grace,	graze,			gut,
creak,	creek,		cue,	coo,	queue,
cream,	creep,		cued,	coon,	cute,
crease,	grease,		cup,	come,	cub,
creed,	greed,	green,			gum,
		greet,	curd,	gird,	girt,
creek,	creak,		curdle,	girdle,	kirtle,
creep,	cream,		curl,	girl,	
crew,	grew,		cut,	cud,	gun,
crewel,	cruel,	gruel,			gut,
crews,	cruise,	cruse,	cite,	coon,	cued,
crib,	crimp,	grim,	cutter,	gunner,	gutter,
		grip,	cygnet,	signet,	
cribbage,	crimpage,		cymbal,	simple,	symbol,
cribbed,	crypt,				

dab,	dam,	damn,	decrees,	decrease,	degrees.
	damp,	tab,	decried,	deride,	
	tamp,	tap,	deed,	dean,	
dace,	days,	daze,	deem,	deep,	team,
dad,	tan,	tat,			teem,
dale,	nail,	tail,	deep,	deem,	team,
		tale,			teem,
dally,	tally,		deer,	dear,	tear.
dam,	dab,	damn,	defied,	defined,	
	damp,	tab,	defined,	defied,	
dame,	tamp,	tap,	degrees,	decrease,	decrees.
damn,	tame,	tape,	deigned,	taint,	
	dab,	dam,	delegate,	delicate,	
	damp,	tab,	delf,	delve,	
	tamp,	tap,	delicate,	delegate,	
damp,	dab,	dam,	dell,	knell,	tell,
	damn,	tab,	delve,	delf,	
	tamp,	tap,	dement,	depend,	
dandle,	tattle,		den,	dead,	debt,
dangle,	tackle,	taggle,		dent,	ten,
		tangle,		tend,	tent,
dare,	tare,	tear,	dens,	dense,	tense,
dart,	tart,		dent,	dead,	debt,
dash,	quash,	latch,		den,	ten,
		lash,		tend,	tent,
daw,	taw,		depart,	debarred,	
day,	dey,		depend,	dement,	
days,	dace,	daze,	deride,	decried,	
daze,	dace,	days,	designed,	decide,	
dazzle,	tassel,		deuce,	dews,	dues,
dead,	debt,	den,	device,	devise,	
	dent,	ten,	devise,	device,	
	tend,	tent,	dew,	do,	due,
deal,	kneel,			to,	too,
deamster,	teamster,				two,
dean,	deed,		dice,	dies,	
deans,	tease,	teens,	did,	din,	dint,
dear,	deer,	tear,		tin,	tint,
death,	length,	tenth,			tit,
debarred,	depart,		die,	dye,	tie,
debt,	dead,	den,	died,	diet,	tide,
	dent,	ten,		tied,	tight,
	tend,	tent,	dies,	dice,	ties,
decide,	designed,		diet,	died,	tide,
decrease,	decrees,	degrees,		tied,	tight,

dig,	ding,	tick,	dock,	tog,	
digger,	tinker,	ting,	dodge,	lodge,	nautch,
dill,	till,		doe,	dō,	notch,
dim,	dip,	tip,		toe,	dough,
dime,	time,	type,	doesn't,	dozen,	tow,
dimple,	tipple,		dogs,	tongs,	
din,	did,	dint,	dole,	knoll,	tole,
	tin,	tint,	doll,	tall,	
		tit,	dome,	dope,	tome,
dine,	tine,		dominate,	nominate,	
ding,	dig,	tick,	don,	dot,	tot,
		ting,	done,	dun,	ton,
dingle,	tickle,	tingle,		tun,	tut,
		tinkle,	don't,	dote,	toat,
dinner,	tiller,	tinder,		toned,	towed,
	tinner,	titter,	doom,	dupe,	tomb,
dint,	did,	din,			tube,
	tin,	tint,	door,	tore,	
		tit,	dope,	dome,	tome,
dip,	dim,	tip,	dose,	doze,	toes,
dire,	dyer,	tire,	dot,	don,	tot,
dirk,	lurk,		dote,	don't,	toat,
dirt,	learn,	turn,		toned,	towed,
disburse,	disperse,		doubt,	down,	town,
discreet,	discrete,		dough,	dō,	doe,
discrete,	discreet,			toe,	tow,
discussed,	disgust,		dove,	duff,	tough,
disdain,	distain,		dowel,	towel,	
disgust,	discussed,		dower,	tower,	
dish,	ditch,	tinge,	down,	doubt,	town,
disperse,	disburse,		doze,	dose,	toes,
displace,	displays,		dozen,	doesn't,	
displays,	displace,		drab,	drachm,	dram,
distain,	disdain,			tram,	tramp,
ditch,	dish,	tinge,			trap,
dive,	knife,	life,	drachm,	drab,	dram,
		live		tram,	tramp,
divide,	divine,				trap,
divine,	divide,		draft,	draught,	
do,	dew,	due,	drag,	drank,	track,
	to,	too,	drained,	trade,	trained,
		two,			trait,
dō,	doe,	dough,	dram,	drab,	drachm,
	toe,	tow,		tram,	tramp,
					trap,

drank,	drag,	track,	dude,	dune,	toot,
draught,	draft,				tune,
drawl,	trawl,		due,	dew,	do,
dray,	tray,			to,	too,
dread,	tread,	trend,			two,
dredge,	drench,	trench,	duel,	newel,	
dress,	tress,		duff,	dove,	tough,
drew,	true,		dug,	duck,	dung,
drill,	trill,			tongue,	tuck,
drink,	trick,	trig,			tug,
drinker,	tricker,	trigger,	dull,	lull,	null,
drip,	trim,	trip,	dumb,	dub,	dump,
driplet,	triplet,				tub,
droop,	troop,	troupe,	dump,	dub,	dumb,
drowned,	trout,				tub,
drub,	drum,	trump,	dun,	done,	ton,
drudge,	trudge,			tun,	tut,
drug,	drunk,	truck,	dune,	dude,	toot,
		trunk,			tune,
dry,	try,		dung,	duck,	dug,
dub,	dumb,	dump,		tongue,	tuck,
		tub,			tug,
duck,	dug,	dung,	dusk,	tusk,	
	tongue,	tuck,	dutch,	touch,	
		tug,	dye,	die,	tie,
duchy,	touchy,		dyer,	dire,	tire,
ear,	hear,	here,		ate,	hade,
earl,	hurl,				hate,
earn,	heard,	herd,	elephant,	elevate,	
	hurt,	urn,	elevate,	elephant,	
eased,	east,		ell,	hell,	
east,	eased,		elm,	helm,	help,
eat,	heat,	heed,	em,	ebb,	hem,
eaves,	heaves,				hemp,
ebb,	em,	hem,	embark,	impark,	
		hemp,	embower,	empower,	
eddy,	heady,		emigrant,	immigrant,	
edge,	etch,	hedge,	eminence,	imminence,	
eel,	heal,	heel,	empower,	embower,	
e'er,	air,	ere,	end,	head,	hen,
	hair,	hare,	enrapt,	enwrapped,	
		heir,	ensign,	incite,	inside,
egg,	ache,				insight,
eight,	aid,	aint,	enwrapped,	enrapt,	

ere,	air, hair,	e'er, hare, heir,	exalt, extend, extent, exult, eye,	exult, extent, extend, exalt, aye, high, height, hied,	
err, etch, eve, ever, ewe,	her, edge, heave, heaver, hew, yew, your,	hege, heifer, hue, you,	eyed, eyelet,	islet,	hie, I, hide, hind, I'd,
ewer,					
face, fact, fad,	phase, fagged, fan, van, fain, fate, feint, vain,	vase, fanged, fat, vat, faint, feign, fete, vane, vein, veil, faint, feign, fete, vane, vein, fain, feign, fete, vane, vein,	fate, fault, fawn, fear, fears, feat, fed, federate, feed, feign,	fade, faint, feint, vain, vault, fond, veer, fierce, feed, fen, vend, venerate, feat, fade, faint, feint, vain,	fain, feign, fete, vane, vein, feet, fend, vent, feet, fain, fate, fete, vane, vein, fain, fate, fete, vane, vein,
fail, fain,	vale, fade, fate, feint, vain,				
faint,	fade, fate, feint, vain,		feint,	fade, faint, feign, vain,	
fair, fake, falls, false, falter, fan,	fare, vague, false, falls, vaulter, fad, van, fag, fact, fair, vast, fad, van,	fat, vat, fagged, fan, vat,	felled, felt, fen, fend, ferry, fetch,	felt, felled, fed, vend, fed, vend, very, vetch,	fend, vent, fen, vent,

fort,	ford,	forte,	fret,	friend,	
forte,	ford,	fort,	fried,	fright,	
forth,	fourth,		friend,	fret,	
foul,	fowl,	vowel,	frieze,	frees,	freeze,
found,	fount,	vowed,	fright,	fried,	
fount,	found,	vowed,	fringe,	French,	fresh,
four,	fore,		frock,	frog,	
fours,	force,		frog,	frock,	
fourth,	forth,		frond,	front,	
fowl,	foul,	vowel,	front,	frond,	
fox,	fogs,		frounce,	frowns,	
tranc,	frank,		frowns,	frounce,	
frank,	franc,		fuel,	fool,	
fraud,	fraught,		fun,	fund,	
fraught,	fraud,		fund,	fun,	
frayed,	freight,		furs,	firs,	furze,
frays,	phrase,		furze,	firs,	furs,
frees,	freeze,	frieze,	fuse,	views,	
freeze,	frees,	frieze,	fuss,	fuzz,	
freight,	frayed,		fuzz,	fuss,	
French,	fresh,	fringe,			
gab,	cab,	camp,	gamble,	camel,	gabble,
	cap,	gam,			gambol,
		gap,	gambol,	camel,	gabble,
gabble,	camel,	gamble,			gamble,
		gambol,	game,	came,	cape,
gable,	cable,		gander,	gadder,	
gad,	can,	canned,	gang,	gag,	
	cant,	can't,	gap,	cab,	camp,
		cat,		cap,	gab,
gadabout,	catamount,				gam,
gadder,	gander,		garb,	carp,	
gag,	gang,		garden,	garnet,	
gage,	cage,		garment,	carpet,	
gain,	cane,	gait,	garner,	garter,	
		gate,	garnet,	garden,	
gait,	cane,	gain,	garret,	carat,	carrot,
		gate,	garter,	garner,	
gall,	call,		gash,	cash,	
gallop,	alum,	galop,	gate,	cane,	gain,
galop,	alum,	gallop,			gait,
gam,	cab,	camp,	gauze,	cause,	
	cap,	gab,	gave,	cave,	
		gap,	gaze,	case,	

gear,	year,		gnash,	dash,	lash,
gee,	she,				latch,
geese,	keys,		gnat,	lad,	land,
germ,	chirp,		gnaw,	law,	
german,	sherbet,		gnawed,	naught,	
get,	yet,		gnome,	loam,	lobe,
geyser,	kaiser,				nope,
ghost,	coast,		gnu,	lieu,	knew,
gib,	chip,	jib,			new,
		ship,	goad,	coat,	code,
giddy,	kitty,			cone,	cote,
gig,	kick,	king,			goat,
		kink,	goal,	coal,	
gild,	gilt,	guilt,	goat,	coat,	code,
	killed,	kilt,		cone,	cote,
gill,	kill,	kiln,			goad,
gilt,	gild,	guilt,	gob,	calm,	cob,
	killed,	kilt,	gobble,	cobble,	
gin,	chin,	chit,	gobbler,	cobbler,	
	jin,	shin,	god,	caught,	cod,
gird,	curd,	girt,		con,	cot,
girdle,	curdle,	kirtle,		got,	yacht,
girl,	curl,		goggle,	cockle,	
girt,	curd,	gird,	gold,	cold,	
glad,	clad,	clan,	gone,	yon,	
		gland,	gong,	cock,	cog,
glair,	glare,		good,	could,	
glamour,	clabber,	clammer,	goose,	use,	
	clamor,	clapper,	gore,	core,	corps,
gland,	clad,	clan,	got,	caught,	cod,
		glad,		con,	cot,
glare,	glair,			god,	yacht,
glass,	class,		gotten,	cotton,	
gleam,	glebe,		gouge,	couch,	
gleaned,	cleaned,	gleet,	gourd,	court,	
glebe,	gleame,		gout,	count,	gowned,
gleet,	cleaned,	gleaned,	gowned,	count,	gout,
glib,	clip,		grab,	crab,	cram,
glimmer,	clipper,			cramp,	gramme,
gloam,	globe,		grace,	craze,	graze,
gloat,	glowed,		grade,	crane,	crate,
globe,	gloam,			grain,	grate,
glowed,	gloat,		graft,	craft,	
glue,	clew,	clue,	grain,	crane,	crate,
glum,	club,	clump,		grade,	grate,
					great,

(To be continued.)

SOME DON'TS TO BE OBSERVED IN TEACHING SPEECH TO THE DEAF.

SARAH JORDAN MONRO, HORACE MANN SCHOOL, BOSTON, MASS.

It is to the teachers of those who hear that instructors of the deaf should turn for help in their work and they should realize more and more that this is as true of speech as of the other branches.

A careful study of the best methods of teaching speech to hearing persons and of training, not only the singing but the speaking voice, has, together with much experience in the adaptation of these methods, made important changes in this department of the education of the deaf.

A teacher who has given much time and thought to this special work is willing to give to others the benefit of her experience and as it is a propensity of human nature to be more readily attracted by a statement of what we ought *not* to do than by one which tells us what we should do, she has chosen the short and concise form of "Don'ts" given below.

In teaching speech to the deaf, in training their voices—

DON'T allow the condition of the muscles in any part of the body to be such as to prevent good speech and a good tone;

DON'T direct a pupil to use his voice until he has gained control of his tongue, in the first position;

DON'T allow a pupil to feel the vibration of the voice in the throat.

If those who wish to ask the "Why?" of the "Don'ts" will write to Mrs. Sarah Jordan Monro, Horace Mann School for the Deaf, 178 Newbury St., Boston, Mass., she will be glad to reply to the inquiries.

REVIEWS.

First Annual Report of the Inspector of Schools for the Deaf, Made to the State Superintendent, June 30, 1902. Madison, Wisconsin.

Mr. W. D. Parker, of Madison, Wisconsin, was appointed Inspector of the public day schools for the Deaf and of the Delavan boarding school on July 1, 1901, in accordance with a law passed by the state legislature during the preceding May. His report of work done during the year and of his studies of questions relating to the education of the deaf is an interesting and valuable contribution to the literature of the profession. There is abundant evidence that he came to the work with a mind quite unbiased by preconceived opinions as to the merits of the various methods of instruction and of organization in the different schools under his observation, and that, with the trained intellect of an expert in the theory and practice of pedagogy, he has sought only to arrive at the truth in all matters of dispute and to determine the principles upon which the education of the Deaf should be based. There may be disagreement regarding the justice of some of his conclusions, which might be modified by longer study and experience in the work, but none will dispute his impartiality and ability in the discharge of his duties.

Mr. Parker reviews the history and the conditions that environ the various schools, and gives numerous statistical tables in connection therewith. He makes an impartial presentation of the claims of the different methods of instruction; speaks of his efforts to increase the professional efficiency of teachers by obtaining from local boards permission for them to visit other schools, and by organizing them as a section of the Wisconsin Teachers' Association; and mentions that the training classes connected with the Milwaukee, Chicago, and Detroit day schools, and the Clarke School and Gallaudet College have been accredited by the State Superintendent in certifying teachers for the Wisconsin day schools.

Apart from financial matters, the Inspector makes the following criticisms of the day schools:

"The 'exclusive oral method' is employed for all pupils; the result is the hopeless task of teaching speech and speech-reading to some pupils whose ages at entrance vary from 4 to 23 years, whose minds are fatally "feeble," and still others who are permanently aphasic or have defective speech organs.

"The opportunity of the day school is disparaged by isolation—isolation of teacher when only one is employed (there are 12 such), isolation owing to ignorance of officers; the result is that the teacher secures less satisfactory results than her patient skill and her motherly care deserve, and professionally she is likely to deterioration owing to want of sympathy of her kind."

He makes the following recommendations:

"Concerning methods of instruction, it is recommended that the day schools continue the oral method and writing as heretofore, that vigorous calisthenics and some Sloyd or other wood work and sewing be practiced daily, that the inspector be authorized to join with local authorities and parents in showing the advantages of the regimen at the state school, whenever individual day school pupils show upon due trial, not to exceed three years' duration, inaptitude in oral work that amounts to arrest in actual speech and intelligence.

"In all such action the consent of the parents and of the President of the Board of Control should be secured, and entrance at the state school should be effected, as a rule, only at its annual opening in the fall; such pupils entered at the state school should be classified under the discretion of the superintendent of that school. Like procedure should be authorized for the transfer of feeble-minded pupils from day schools to the Home at Chippewa Falls.

"Also, the information concerning methods, accommodations, etc., at the day and state schools should be carried repeatedly by circulars to the attention of parents of deaf minors who have not attended any Wisconsin schools for the deaf, thus affording parents repeated occasion for determining whether their children shall be instructed and to choose between the exclusive oral and the combined method; and between paying board and having free home in the institution.

"A recommendation concerning the state school is included in the suggestion in favor of the permanent separation of the inmates who are taught in the oral system, and the creation of ample modern hospital facilities."

A voluminous appendix to the report gives excerpts from the reports of many schools for the deaf showing their attitude on methods of instruction; extracts from letters from adult Deaf, whose views regarding methods were solicited; opinions of individuals and organizations on the same subject; statistics of the Wisconsin day schools; and miscellaneous statistics.

North Carolina School for the Deaf and Dumb at Morganton, Sixth Biennial Report.

This report shows that the Morganton school is as regards material equipment, organization, and methods of instruction, the peer of any institution for the education of the Deaf in America. Since the last report, two additions have been made to the main building, and a complete system of water-works has been installed. There are now 237 pupils in attendance, and Mr. Goodwin claims there are probably as many more deaf children in the state who should be enjoying the advantages of the school, and recommends the passage of a compulsory education law for their benefit. There are distinct manual and oral departments, the course of study being the same in each, with the exception that in the later the pupils are taught speech and speech-reading and by means of speech. Every pupil entering the school is given a trial in the oral department, and transferred to the manual only on demonstration of his inability to learn, and to learn by, speech and speech-reading. We note that it was thought necessary to transfer from the oral to the manual department three pupils last year and four this year. There are at present 111 pupils under oral instruction. In the manual department signs are discouraged both in and out of school, instruction being by means of spelling. The separation of the oral and manual pupils is as complete as may be where they attend one school, extending to chapel service and the dining room as well as the class-rooms. The rotary method of recitations has been adopted with the advanced oral classes, and of this innovation Mrs. Hurd, the Chief Instructor of the department, says:

"The advantages of this plan are already evident. The classes are better graded, yet no more teachers are required; the pupils come in touch with more than one teacher; the work can be more evenly balanced, preventing the tendency towards spending more than enough time upon one kind of work at the expense of another; the pupils enjoy the change from the surroundings of one room to those of another, and the value of the additional practice in speaking to, and reading the speech of more than one teacher can not be measured."

American Annals of the Deaf, Washington, D. C., Jan., 1903.

"Physical Characteristics of Pupils," by James L. Smith, Faribault, Minnesota. This is a continuation of the paper on the same subject printed in the September Annals, and reviewed in the December REVIEW. It tells of some very practical tests made of the pupils' eyesight and shows their practical application to the educational work of the school. It would be greatly to the advantage of the pupils if similar tests were made in every school.

"Trying the Use of the Akoulalion," by Mabel Ellery Adams, Boston, Mass. Miss Adams gives the results obtained with the instrument since the publication of her article in the March, 1902, Annals, describing her experience with it in teaching a deaf boy. Her conclusions are that with a child of the degree of hearing possessed by this pupil (It is so small that doctors claim it is nil), he will come by sufficient practice, to recognize with certainty a small vocabulary, and the practice will give greater accuracy of pronunciation and improved emphasis and manner of speech, but there is no evidence that it will modify or change the tone quality.

Other interesting and helpful articles to teachers are "History," by Warren Robinson, of Delavan, Wisconsin, and "Notes on Language Teaching," by Edward A. Tillinghast, of Danville, Kentucky. There is also an account of "A Case of Hysterical Deaf-Mutism" reprinted from the Laryngoscope, the usual statistics of schools, which are reviewed in our editorial department, a list of instructors in American schools for the Deaf, and school notes.

Forty-fifth Annual Report of the Columbia Institution for the Deaf and Dumb, Washington, D. C.

The number of pupils in the institution during the year was 200, of whom 136 were in the college department. Three young men who graduated in June were awarded the degree of bachelor of science, they having completed the required course in scientific and technical work, and two of these are now completing their studies, one in the Georgia School of Technology, the other in Washington University, St. Louis. In this connection President Gallaudet says:

“In this way the problem of technical education for the deaf seems to be nearing solution. Bright young deaf men and women with sound training in the elements of chemistry, civil engineering, mechanical engineering, or architecture can, after leaving the college, finish their courses in two or three years in the best technical schools of the country and be prepared to begin their professions with the best possible preparation.

“If a fund could be secured for the assistance of such graduates of the college in pursuing their studies further, the success of this plan would be assured.”

That the college continues to make progress in the teaching and the employment of speech and speech-reading is shown by the following paragraph that appears in the report:

“In the divisions of large classes in the college into sections, speech has become the basis for division. In the sections containing those most proficient in speech a great deal of recitation work has been done orally, and in all classes students have been encouraged to use what power of speech or speech-reading they command.”

Forty-sixth Annual Report of the Texas Deaf and Dumb Asylum, Austin, Texas.

Mr. B. F. McNulty, the Superintendent, in his report to the Board, draws a striking picture of the deplorable condition in which he found the institution buildings at the beginning of his administration in February, 1899, and reviews the improvements since made. The Texas School now ranks among the best equipped and most progressive in methods of administra-

tion and instruction, and the progress it has made and is making shows what may be accomplished by a man of energy, tact, and good judgment, though he enter on the work without previous experience with the Deaf. During less than three years the sum of \$79,019.17 has been expended in repairs and the erection of new buildings, and the number of pupils has increased from 260 to 390, an attendance of 500 being indicated for the next session (the present school year). Of these pupils, 204 were in the oral department, 180 in the manual department, 3 were special pupils in the industrial department, and 3 were blind-deaf. Regarding the teaching of speech, the report says: "The policy of giving all marticulates who are not too old and have sufficient mentality a trial in speech, is adhered to. A comparatively small percentage of the previous year's beginners were last year transferred from the oral to the manual department. As the work of speech teaching becomes better systematized and more efficient, this number will grow somewhat less."

The Texas School now uses fuel oil in place of coal and we are told that the cost of installing the plant and operating it for one year amounted to less by several hundred dollars than the ordinary coal bill for the same length of time.

We are pleased to learn from other sources that Mr. McNulty has been reappointed by the new state administration, and the school is therefore assured of continued advancement for some time to come.

Home for the Training in Speech of Deaf Children Before They are of School Age, Philadelphia—Sixth Report.

This report is illustrated very prettily with numerous half-tone engravings of the very young children who are its pupils. Miss Garrett, the Principal, states that since the last report five children who have completed the course have been admitted to schools for the hearing, and presents letters from their teachers that show they are all making satisfactory progress, some doing much better than the average hearing pupil.

Nordisk Tidskrift for Dofstumskolan, [Scandinavian Journal of Deaf-mute Education], Göteborg, Sweden, Nos. 6—11, 1902.

“Observations Regarding Formal Speech Exercises” by G. Forchhammer. “Report of J. Wallin to the Royal Swedish Ministry of Ecclesiastical Affairs on his Visits to Various Institutions for the Deaf in Germany and Denmark.” Among the rest Mr. Wallin visited the old established and famous school in the city of Schleswig. As regards the instruction in this institution he says: “The main object of the instruction is to enable the children to freely and unhesitatingly express themselves relative to occurrences in their common every-day life. These occurrences form in the first place the subject of instruction, and their description is repeated innumerable times. The teacher has, therefore, considerable freedom in the selection of his subjects, and must be prepared to take up any occurrence which attracts attention. The instruction thereby becomes an object lesson in the fullest sense of the term, and the spoken word is intimately connected with an actual occurrence.

“Printed text books are used, it is true, from the beginning of the second year, but as a general rule the subject for the reading lessons are taken from occurrences in the school room. “Whenever a pencil falls on the floor, a window is opened or closed, a fly settles on the nose of one of the pupils or the teacher, instruction is interrupted and the occurrence forms the subject of conversation, often for the fiftieth time.

“Only in rare cases are pictures employed for object lessons. The teacher takes his class out with him into real life. Surrounded by his pupils he takes his position on a street or in a square, where there is a good deal of life, and converses with them on everything that passes, e. g., here comes a countryman with his wagon; he has butter to sell; a pigeon settles on the roof; there two boys are fighting; they are naughty boys! etc. The pupils are also sent to stores to buy what is needed for the house and kitchen; and they have often to trot to and fro several times till they succeed in making themselves understood.

“A circumstance which struck me very favorably was this that the teachers take great care that an object which is to serve to impress an idea on the minds of the pupils, shall be by itself, that is to say, it shall not be brought before the eyes of the pupils in groups or in connection with other objects, as thereby the idea becomes vague, undefined and possibly erroneous.

To teach, e. g., the meaning of "goose" it would confuse the pupils if a goose were shown to them among a flock of different kinds of poultry. To teach the word "cup," the cup is shown without the saucer, which forms an object by itself.

"This principle is so thoroughly carried out in the Schleswig institution that in instruction in arithmetic by means of black-board, a cloth was hung over those portions where there were other figures than the ones under consideration.

"As another instance of this system it may be mentioned that one of the teachers got a potted plant and let it stand in the schoolroom without water till it began to wither. The pupils who watched this saw that the plant withered, that it was almost dying. Why? The soil in the pot was dry. What was the cause of this? The plant needed water. What should, therefore, be done? The plant should be watered. This was done and after a few hours the plant began to revive. This was shown and explained in a similar way.

On the wall of the highest room there hung a board containing the "Ten Speech Commandments" which are as follows:

1. Open the mouth sufficiently wide to let the vowels sound clear and full.
2. Pronounce all consonants, especially "f," "s" and "sch" correctly and distinctly.
3. Pay close attention to short and long vowels.
4. Pronounce the final sound invariably short, but do not swallow the final "e."
5. Connect the words in a sentence, but do not interpolate an incorrect sound.
6. Give always the correct accent.
7. Speak neither too loud nor too low, or through the nose.
8. In speaking do not squeeze out the words.
9. Do not make faces while speaking.
10. Try to speak well in all places and at all times, even on the playground or on the street.

The collection for a monument for Hill has been closed in the Scandinavian countries. It appears from a statement in the Journal that the amount collected in Sweden was 149 kroner and in Denmark 102 kroner (in all \$67.00).

"The Development of the Education of Teachers of the Deaf and its Present Condition in Some of the Countries of Europe" by A. F. Nyström. The first instalment of this article is devoted to Prussia. The first step in organizing a teachers' education was a ministerial order of December 20th, 1811, placing a certain Mr. Neumann as "learning teacher" in the Berlin

institution, for the purpose—as it was stated—that Neumann when returning to his native province should be able to instruct as a teacher of a public school not only the normally endowed children but also the deaf. In 1813 it was resolved that every other year such a “learning teacher” should enter the Berlin institution. The course comprised a probation time of four weeks, followed by a period of 6 months for learning; followed in its turn by a period of teaching. This was of course only a small beginning, but already in 1828 a complete course of study for candidates for teachers’ places in institutions for the Deaf was elaborated; and from that year a number of young men who desired to make the teaching of the Deaf their life work entered this course every year.

According to the present regulations, candidates for such places must pass two examinations, viz: the “teachers’ examination” and the “Directors’ examination.” There is no normal school in the present sense of the term. The education of teachers who study for the “teachers’ examination” is confined to the various provinces. The course which lasts two years is for both male and female students. They are at liberty to attend any institution for the deaf which they may prefer, but all those who belong to one province must undergo their examination at some institution in their province selected by the Minister of Public Instruction. Although the education of teachers is scattered throughout the country, it must be stated that the Royal Institution in Berlin forms the central point. This Institution has to fulfill the following duties:

1. The “Directors’ examination” for the whole of Prussia is always held at this institution.

2. The Royal Institution is attended by all the candidates from the Province of Brandenburg; but in addition by a great many from other provinces of Prussia;

3. Special lectures for the candidates are delivered regularly at the Royal Institution which is not the case at the other institutions. The two years’ course embraces the following: lectures in the institution; lectures in the Berlin clinic for diseases of the ear; practical exercises in the various classes of the institution under the personal direction of the Director; exercises in the classes without the constant assistance of the Director; witnessing instruction in the various classes by the teachers;

surveillance over the boys of the institution outside of study hours.

The lectures in the institution embrace two principal subjects; viz.: theory and history of deaf-mute education. The text-books used are "Manual of Deaf-Mute Education" and "History of Deaf-Mute Education," both by Walther. The lectures in the clinic for diseases of the ear take place once a week, and relate to the anatomy and physiology of the organs and their causes. Practical exercises in the classes are held twice a week, when one of the candidates imparts instruction—under the direction of the Director. Before the lesson opens, the candidate must give a written outline of the same; and after the lesson it is subjected to criticism in the presence of all the candidates and teachers. Exercises without the aid of the Director take place four times a week. The examinations which candidates have to pass, are both written and oral; and every candidate who has passed the examination receives a certificate to that effect from the Royal Board of Examiners, which entitles him to apply for a place as teacher at any of the schools for the deaf in Prussia.

The higher examination—for Directors' places—is held only at the Royal Institution in Berlin. To enter the lists for this examination a person must have successfully filled a teacher's place for at least five years.

To prepare themselves for this examination, the candidates are permitted to spend some time at the Royal Institution, and if they are without means, the Government allows each one 100 mark (equal to \$23.80) per month during this period.

The examination is written and oral. The written portion consists in the writing of a composition under the surveillance of some of the professors. The oral examination embraces the following subjects: 1. Reading and translating from French and English works on the education of the deaf; questions in the grammar of these two languages. 2. Phonetics and its application to articulation. 3. Anatomy and physiology of the organs of speech and hearing. 4. Acoustics. 5. Methods of instruction of the deaf. 6. History of the education of the deaf. The practical examination consists in instructing a class of deaf pupils.

“The Preparatory School at Göteborg” by F. Nordin: Mr. Nordin proposes that the Carnegie Fund, given for the education of the deaf, should at least, in part, be devoted to such a school. Many people may think that the education of the deaf is well cared for in Sweden, and that nothing more is needed. But this is not altogether a correct view. It should be borne in mind what a vast difference there is between hearing and deaf children at the time when they enter school. The hearing children come with fully developed speech by which they can express all their thoughts, ideas and wishes, whilst the deaf lack all this. The mental horizon of the hearing children is wider and fuller, their ideas of rights and duties are clearer. The difference between the two kinds of children is in fact so enormous that they cannot be brought to the same level during the period of schooling. All this and much more can be said in favor of a preparatory school for deaf children under school age. This whole question, as well as that of supplementary schools for pupils after leaving school, is the question of the day in many other countries, such as Denmark, Germany, etc. Such a school should have a 4 years’ course, and be in the nature of a “kindergarten.”

The Swedish Deaf-Mute Teachers’ Association, and the Swedish Government has again this year, as in previous years, been very liberal in providing teachers with the means for visiting foreign countries, and becoming practically acquainted with the instruction of the deaf in those countries. This is an example worthy of imitation, for it will result in a practical benefit to the teachers, something which they could not derive from the reading of books on the subject.

“Lars Gustaf Lindström” by E. A. Zotterman. Few European countries have, comparatively speaking, done so much for the education and advancement of the deaf as the three Scandinavian kingdoms of Sweden, Norway and Denmark. Among the men standing in the front rank of the movement in Sweden is undoubtedly the Rev. Lars Gustaf Lindström, born in 1842 and died August 23rd, 1902, whose biography, with portrait, is given in No. 10 of the “Tidskrift.” Although he considered the teaching of religion as his life’s calling, he at an

early period in his career, began to take the deepest interest in the education of the deaf, and was for a number of years religious instructor at the well known institution for the deaf at Manilla near Stockholm. His memory in Sweden will always be associated with this branch of his activity. He was a prominent and exceedingly active member of the Commission appointed by the King in 1876 to make a report on the condition of deaf-mute instruction and frame propositions for its improvement. This report formed the basis of the Law of 1889 which, though it did not realize *all* the hopes of the friends of the deaf, was nevertheless a great step in advance. Mr. Lindström was a zealous advocate of the speech method, and strongly favored small boarding schools in preference to large ones, where each pupil could not receive the attention he needed. Whenever the history of deaf-mute instruction in Sweden is written, Lindström will be mentioned as one of the pioneers in the cause.

“Instruction by the ear, with special regard to the Institution at Nyborg, Denmark;” an address delivered at the third meeting of the Danish teachers of the deaf at Nyborg in April, 1902, by A. Hansen. Mr. Hansen gives an historic outline of the growth and development of this instruction from the earliest times. Thus we learn that in 1620 a Mr. Bonet, a Spaniard, gave an account of how in his time the hearing of the deaf was sought to be developed. The deaf were placed in large empty barrels and compelled to yell as loud as possible, so they might hear the echo from the sides of the barrel. Sometimes the poor deaf were forced to yell till the blood gushed from their throat. These first hearing exercises certainly appear to us very barbarous. After mentioning the experiments made at different times by Pereire and Itard in France, Barriés in Hamburg, Tappe in Berlin, Dr. Samuel Akerly in New York, Lehfeldt and Urbantschitsch in Vienna, Mr. Hansen devotes same time to the experiments made by Prof. Bezold of Munich with the continuous series of sounds invented by him with 32 to 500,000 vibrations per second. By means of this apparatus it can be ascertained in what part of the scale of sounds the defect in hearing exists. Bezold was not satisfied with this scientific result, but is anxious that the practical instruction of the deaf should derive

some benefit therefrom. He draws the conclusion that a persistent speech exercise through the ear deserves to be carried out, and should be carried out on the basis of the facts proven both by his and Prof. Urbantschitsch's experiments. With the view to obtain satisfactory results from this kind of instruction, he proposes to divide all the pupils into three groups. The positively and absolutely deaf form a group by themselves; the second group comprises those who have become deaf some time early in life but have preserved remnants of speech; whilst those who have same capacity for hearing form the third group. During the later years of schooling these two last mentioned classes may, however, be instructed in common. As regards the Nyborg School with its 75 pupils, Mr. Hansen states that he has elaborated a scheme, according to which the pupils are divided first of all into 3 groups (A, B, and C,) as regards their talents viz., talented, mediocre and poor; these groups are again subdivided, according to their ability to hear, into three other groups, (A, B, C,) viz.: the first can hear vowels, and are more or less able to hear sentences; the second are defective in hearing vowels; and the third group comprises those who possess a very defective hearing or none at all. There is made, however, a third division (A, B, C,) according to the capacity for speaking possessed by the pupils when they enter the school. This division is of course only approximately correct. Group A comprises those who when entering the school possessed a more or less perfect child's speech; group B those whose speech consisted of broken words and phrases; and group C those who must be considered as absolutely or nearly mute. Although there are many difficulties in the way of strictly carrying out these divisions in all cases, instruction is on the whole adapted to this classification as well as circumstances present and generally with good results, each pupil receiving that care and that instruction which his physical and mental capacities and his previous life demand. This leaves of course much to be desired, but it does at any rate point out the principle which should be followed in the instruction of the deaf.

Verwaltungs-bericht des Magistrats Zu Berlin für das
Etatsjahr, 1901. No.8. Bericht der städtischen Schuldeputation. (Report of the School-Trustees of Berlin for the fiscal year 1901. No. 8. Report of the school board of the city).

In the classification of the schools of the city of Berlin, we find that those of the Deaf and Blind are placed under the title Preparatory Schools. In the present report the following article occurs relative to the treatment necessary for children who are physically defective:

The children who for this cause cannot take part in the general class instruction will receive instruction at their homes. The respective teachers will receive an adequate salary.

The money applied for this purpose amounts to about 10,000 marks.

The course of instruction for those who stammer had been reorganized and 2000 marks were expended for it. There was a principal and a supplementary course. There were 74 pupils who took part in the principal course, (5 classes of 12 pupils, and one class of 14 pupils), and there were 69 pupils in the supplementary course. Only boys of from 12 to 14 years of age were admitted, who had been selected by the school directors and inspectors, and had also been examined by the physician.

The length of the principal course was ten weeks or 60 hours, and that of the supplementary course was 40 hours.

The time for the daily exercises was one hour, that is from 12 to 1 o'clock. Five teachers and one physician were in charge of the courses, who had all been prepared according to the same method, and who all taught the same method. The attendance of the children at the school was large, and the results were good.

In the principal course complete success had been obtained with 27 pupils, and fair success with 47. In the supplementary course complete success with 48, and only an improvement with 21 pupils. There was organized besides a class for those hard of hearing and of little intelligence, who were taught by a teacher of deaf-mutes.

From the Society for the Feeding of Poor Children, the sum of 3000 marks had been received, and placed at the disposition

of the Principal of the school for the luncheon of the destitute children, which consists of bread and butter, hot milk, and mush. Besides this income from the "Rudolph fund" of 1081, 35 marks was destined also for this same object.

The City Schools for the Deaf: At the beginning of the fiscal year of 1891, there were with the Principal, 15 teacher specialists and 3 special teachers for manual work. As they were obliged in October to establish another class for articulation, they increased the number of teachers, and thus were able to have 15 classes.

In cases of illness among the teachers, the substitutes were taken from the College of Teachers, but only in case of a prolonged absence on account of illness, and a supplementary salary was provided. The state of health of the teachers however had been satisfactory on the whole, so that the school had not suffered from this disturbance.

The number of pupils which in October, 1900, was 158, increased in October, 1901, to 178 pupils. The average number of pupils for each class was 12.

Arrangements had been made for the division of the pupils according to their ability, in different grades, and also for the hours of instruction of the single pupils; The necessary care also was taken of the many feeble minded children who cannot keep up with the class instruction; as well as for those children who only lately become totally or even partially deaf, and needed a longer instruction than the others.

The attendance had been regular and punctual, although there is no law for the compulsory education of the Deaf.

The orphan Deaf of the city could find board in families near the school so that they were able to attend the school regularly. The necessary means for providing destitute deaf children with warm clothing for the winter was given by public charity at a Christmas fair.

The necessary cooperation of the home with the school for the Deaf was obtained by the institution of "lèssons for the parents," in which the parents and relatives of deaf children might accustom themselves to the process of their instruction, and thus be able to help them at home.

The state of health of the Deaf had been good for the whole year. Thanks to the cooperation of the Society of the vacation colony, 14 deaf children had been allowed to participate in the vacation colony at Soolbad.

The vacation for the Deaf was the same in time and length as that of the other schools. Visits to the Zoological garden were also arranged for the pupils, and like the preceding years, gratuitous tickets were provided for the baths of the city.

The school library of about 200 volumes of the best writings for the young was diligently used by the pupils of the higher classes.

The Deaf are allowed to observe, as in former years, all the national, civil, and sacred holidays.

The fifth paragraph, concerning the graduation of the pupils from the school, is of special interest:

After leaving the school the pupils can learn a trade, the boys some kind of manual work and the girls, when they cannot find work at home, are taught sewing, or other work, so that they can support themselves. It is not difficult to find good places for such instruction, for Deaf apprentices are taken very willingly as there is no special difficulty in teaching them as they can be taught orally; and there is besides a premium of 150 marks paid by the Government to the person who has taught a deaf-mute a trade for a period of 4 years. The pupils however after leaving school continue to attend the city schools for a post-graduate course, and thus remain in close relation with the school and with their teachers. This post-graduate course for the Deaf consists in confirming and extending the knowledge already acquired in school, and in putting the pupils more and more in relation with practical life, and in perfecting them in spoken language and in lip-reading.

The city schools for the Deaf were much-visited during the past year by the Directors, Inspectors, and Physicians of the schools for the Deaf, as well as by other persons who take interest in this special branch of instruction. The local teachers also of the supplementary classes, and those who direct the courses for stammering, made visits to the school in the interest of their missions.

**Annual Report of the Committee of the Yorkshire(England)
Institution for the Education of Deaf and Dumb Children,
for the year 1901—1902.**

This school reports an attendance of 119 pupils. A new school building has recently been completed. It contains a large, well lighted central hall with ten class rooms around it and a large room equipped for the teaching of cooking, laundry work, and dairy work to the girls. An interesting feature of the report is the replies to circulars sent out by the management making inquiries of friends regarding former pupils. 73 responses were received. The answers to the questions relating to speech and speech-reading were as follows:

Does he (or she) give satisfaction?—Yes, 70.

Does he (or she) continue to use his (or her) speech?—Yes, 58,
No, 6.

Can he (or she) make himself (or herself) generally understood by speech?—Yes, 50. No, 7 (4 of which are qualified as to degree).

Does he (or she) read the lips of others speaking to him (or her)?—Yes, 59. No, 2 (several qualified).

Do you value the amount of speech and lip-reading which he (or she) possesses?—Yes, very much indeed, we think it of great benefit, &c., 60. No, not much, &c., 3.

Does he (or she) associate with the adult Deaf and Dumb?—Yes, 36. No, 13. Qualified, 14.

**Statische Nachrichten über die Taubstummen-Anstalten
Deutschlands und deren Lehrkräfte für das Jahr 1903. VII.
Jahrgang. Bearbeitet vom Königlichen. Schulrat. I. Ra-
domski, Direktor der Provinzial-Taubstummenanstalt in
Posen, Posen. Bei d. Verfasser, 1903 (Statistical Notes on
the German Institutions for the Deaf and their teachers for the
year 1903. 7th year. Compiled by I. Radomski, Principal
of the Provincial Institution for the Deaf at Posen).**

This is the seventh year since Mr. Radomski, the Principal of the Institution of Posen, began the publication of statistical notes in regard to the schools and institutions of the Deaf in Germany. We find in the first place an index of the teachers

and principals of all the schools for the Deaf in Germany; afterwards particular notices are given of every school and institute, with the number of pupils, the form of the school (day or boarding-school), religion of the teachers, the date of their birth, and of the beginning of their career, amount of salary, etc.

The volume is in the form of a note-book, and may be used as such as an aid to memory, as well as for the didactic program of the school.

Among the statistical notes, the following deserve special mention. Of the 89 institutes now existing in Germany for the instruction of the Deaf, 39 are day-schools, 38 institutions, and 12 of a mixed form (with boarding and day scholars). The total number of the Deaf now actually under instruction is 6607, divided into 674 classes with 738 teachers. The pupils divided according to sex, 3625 males and 2982 females.

According to the last general census of the population, there existed in Germany in 1900 a total of 31278 deaf-mutes, of whom 215 were also affected with blindness. The Deaf are thus divided among the various provinces: Province of East Prussia 3663, Province of West Prussia 2661, Berlin 1328, Brandenburg 2536, Pomerania 1835, Posen 2974, Silesia 4478, Saxony 2015, Schleswig-Holstein 829, Hanover 1711, Westphalia 1682, Country of the Rhine 3621, Hohenzollern 49.

All the institutions and schools are under the supervision of the Minister, exercised by special officers, there being in every province a Superintendent and a Director of the studies who supervises the work of the schools for the Deaf.

In the course of the past year (Aug. 1901—July 1902), seven teachers retired on a pension on account of age, and six died.

The course of instruction in the various schools is of 6, 7, and 8 years. The duration of the weekly lessons is different in the different schools. In 3 institutes they have 24 hours a week of lessons: in 13, 26; in 7, 28; in 11, 30; in 1, 32; in 3, 24—26; in 4, 26—28; in 1, 28—30; in 2, 24—31; in 2, 24—28; in 2, 25—28; in 1, 27—29.

In the period mentioned above 17 special publications have been issued, of which 8 in the service of the teachers, and 9 as text books for the school.

Besides the German convention of the Teachers of the Deaf, there exists in Prussia also an association of educators with statutes and special conditions.

Elementary instruction for the Deaf is compulsory by law in the following states and provinces: Schleswig-Holstein, Saxony, Weimar, Eisenach, Saxony-Coburg-Gotha, Saxony-Meiningen-Hildburghausen, Oldenburg, Anhalt, Brunswick, Bremen, Lübeck, Kingdom of Saxony, Denmark, Norway, Lippe.

Memoria del Instituto Nacional de Sordomudos correspondiente al año 1901. [Report of the National Institute for the Deaf (boys) for the year 1901, Buenos Aires, 1902].

Prof. Ayrolo, the Principal of the National Institution for the Deaf at Buenos Aires presents his annual report to the Minister of Public Instruction of the Argentine Republic, saying that the Institute continues to progress although its budget has been continually diminished. From the report we find the following information: During the last year (1901) the number of pupils was 88, and the tuition of each pupil amounted to about \$5.50 per month. Speaking of the pupils and their mental condition, Prof. Ayrolo gives an interesting exposition of the various causes which produced deaf-mutism. Among 88 pupils 19 are foreigners, 12 are Italian, 1 French, 1 North American, 1 Greek, and 4 from the contiguous Republic of Uruguay. Among the trades, carpentry gave the best results. The school building had been improved by some repairs and changes.

El Sordomudo Argentino. Revista Mensual. Organ del Instituto Nacional de Sordomudos. Año II, Nos. 9 y 10, Julio y Agosto de 1902. [The Argentine Deaf-Mute. A Monthly Review of the National Institute for the Deaf at Buenos Aires. Argentine Republic. II year. Nos. 9 and 10, July and August, 1902].

“Historical Rectification” is the subject of a series of official documents upon the basis of which is demonstrated that the Institute at Buenos Aires was the first one in the Argentine

Republic for the education of the Deaf. This rectification has been suggested by the fact that in the Annual Report of the same Institute for the year 1895, it was stated by mistake that the Institute of Buenos Aires was opened in the year 1870, and was therefore the second among those of the Republics of South America. The official documents in regard to the commencement of the education of the Deaf at Buenos Aires show that the school for the Deaf was founded in that Capital in the year 1857.

Among the other articles published in this number the following must be noticed: "Psycho-Physiology of the Language of Deaf, Idiot and of Aphasic persons," the conclusion of a paper by Dr. Horace G. Pinero; "The Speech of Many of the Deaf," as the principal point of accusation against the German system; "A Contribution to the teaching of Articulation," by P. Kopka. (translated from the German by Prof. G. Ferreri); 'Pyschology of Language,' by N. R. D. Alfonso. (Translated from Italian by J. P. Diaz Gomez).—Juan A. Pla speaks about the utility of excursions for practical teaching, and L. Morzone publishes the paper read by him on the occasion of the public exercises at the end of the scholastic year in the Institution for the Deaf at La Plata.

Among the reviews a minute account is given of the late reports of the North American institutions of Philadelphia (Mt. Airy) and Ohio.—Much domestic and foreign information show that the revived magazine takes its place already among the interesting periodical publications for the Deaf.

Organ der Taubstummen-Anstalten in Deutschland] Organ of the deaf-mute Institutions of Germany], 48th year, Parts 11 and 12, Friedberg, November and December, 1902.

"The Organization of Deaf-mute Education From the Point of View of Dividing the Pupils According to their Mental Capacity, with Special Reference to the Province of Hanover," by Ch. Seel and H. Vahle. This essay passes by the general theoretical discussion as to the necessity and possibility of dividing the pupils, and merely endeavors to bring the discussion as to the realization and practical working of the principle of

division which will be most beneficial to the education of the Deaf as near as possible to some conclusion. The various points which come into question are the following:

1. The correct and earliest possible division according to mental capacity. This will mainly depend on a thorough knowledge of the capacity of each pupil. The first year of schooling which is principally devoted to the laying of a solid foundation of the technical and phonetic sides of speech does not afford a full opportunity for reaching the end in view; thus, it must be said that the provisional division of the first year cannot be made definite and approximately correct till the second year. To make the division as nearly as possible correct, all the pupils should be together in one place. It is, therefore, necessary that the pupils of one year from the entire Province should be kept together in one institution, and be there instructed for two years till the definite division is made.

2. How shall the sign language be kept within the proper limits? As it has been shown by experience that the German method is least able to influence the speech of the deaf in case of dull pupils, and that, consequently, these pupils will use the sign language more than others, they should be kept separate from the other pupils. Calling the three grades—according to mental capacity—A, B, and C, it will, for the purpose of limiting the use of the sign-language, be most advantageous to have a separate institution for each of these grades (A being the gifted, and C the dull pupils). This, therefore, decides the question where the pupils are to be placed *after* the definite division has been made.

3. The classes should be as far as possible uniform as to the number and age of the pupils.

4. Educational drawbacks should be avoided. Care should be taken that during and after the division the pupils do not become conscious of the fact that the basis and object of this division is the different mental capacity. If this is not done, the consequence will in most cases be that the brighter scholars look down upon the less gifted as “stupid ones,” and that among them a very reprehensible spirit of pride is fostered, while on the other hand the less gifted will lose self-confidence and find fault with their fate.

5. Fullest possible employment of specialists. Teachers of the deaf should not be mere routine-men. They should constantly study the organs of speech, the physiology of speech, and endeavor to utilize everything new in well tried experiments; they should be possessed of a calm temper, much patience and self-control, to bear up among the many and severe disappoint-

ments of their calling and its many galling experiences. They should finally have a strong constitution and exceptionally strong and healthy organs of breathing and speech. Only specialists of this character will be sure of success.

6. The work of teaching should be divided as evenly and justly as possible among the different teachers and the Directors of the Institution, so as not to overburden the one, whilst the work of the other is comparatively light.

7. There should be uniformity of instruction, as to the arrangement of the various subjects, the course of instruction (number of hours for each subject), development of didactics and methodics, due reference being had to the special capacity of each pupil. The uniformity of the standard of instruction and the constant comparison of the results will create a spirit of noble emulation among the teachers of an institution.

8. Even in view of the education of the teachers with the greatest possible freedom from disturbing elements, it will be advisable to have two institutions. If articulation instruction is imparted only in one institution, the young teacher must after having familiarized himself with this branch, be transferred to some other institution, as the field for observation and practice is too small with only three so-called "A" (gifted pupils) classes. Moreover he would have to be employed for some time at a so-called "C" (less gifted pupils) institution. If there are two institutions with a middle (B) and upper class, (A), the first transfer is not necessary, but only the one to the "C" institution.

"Albin Watzulik's visit to Prof. Vatter in Frankfort-on-the-Main" by K. Finkhl (Schleswig). A graphic description of the meeting of the two great teachers of the deaf whose methods are diametrically opposed to each other (Watzulik, sign method; and Vatter, speech method). An account of this meeting has already been given in a previous number of THE ASSOCIATION REVIEW. "The Fifth German Congress of Deaf-mutes" held at Berlin in August, 1902, by H. Lehm. "The Third Meeting of the Association of Teachers of the Deaf of Northwestern Germany" held at Onabrick in October, 1902. "A New Invention," by Eduard Rozsa, Budapest. A strong argument against the practicability and usefulness of the "phonetic hand alphabet" invented by Prof. Forchhammer (Denmark). Mr. Rozsa states in the name of all the adherents of the German method, that Forchhammer's invention must be termed an assault on that method, and should be vigorously opposed.

CURRENT EDUCATIONAL LITERATURE.

The Needs of American Public Education—By Charles W. Eliot, President of Harvard University.

We present below parts of a lengthy address delivered by President Eliot before the Rhode Island Institute of Instruction October 3rd, 1902, and published in full in the December issue of *The World's Work*. The speaker's aim is to justify his advocacy, in previous addresses, of larger expenditures for education in the United States. After demonstrating the importance of providing school buildings that shall be fire-proof and capable of being kept in a thoroughly sanitary condition, and of employing physicians to look after the health of the pupils and guard against the spread of contagious diseases, he says:

The next object for additional expenditure is better teachers. Of course, teachers should know well the subjects which they are to teach; but that is by no means sufficient. Every teacher should also know the best methods of teaching his subjects. College professors heretofore have been apt to think that knowledge of the subject to be taught was the sufficient qualification of a teacher; but all colleges, as well as all schools, have suffered immeasurable losses as a result of this delusion. Of course, it is better for a teacher to know his subject without knowing the right method of teaching it than to acquire a formal method without knowing the subject; because a conscientious teacher, by experimenting on his pupils, may in years acquire a good method at their expense; but teachers who are acquainted at the start with both subject and method are what schools and colleges urgently need. To secure this double proficiency means a greater expenditure on the training of teachers. Under the head of better teachers may best be mentioned certain specific desiderata such as a larger proportion of male teachers in urban school systems, a larger proportion of women teachers

who have been educated at college, and a larger proportion of both men and women who have received a genuine normal school training. All these are expensive desiderata.

With better teachers, numerous other improvements would come in, as, for instance, a better teaching of literature and of history, and better biological and geographical instruction, these natural-history studies being pursued by the pupils in the open air as well as in the schoolrooms. I have elsewhere urged that all public open spaces, whether country parks, forests, beaches, city squares, gardens, or parkways, should be utilized for the instruction of the children of the public schools by teachers capable of interesting them in the phenomena of plant and animal life. But this means quite a new breed of common school teachers. The teaching of geography in the open air is a delightful form of instruction; but it requires a teacher fully possessed of the principles of physiography, and knowing how to illustrate these principles on a small scale in gutters, brooks, gullies, ravines, hillsides and hilltops. Some nature study of this desirable sort has been already introduced into American schools; but it is not persisted in through years enough of the school course. There is needed much more of this sort of study, beginning in the kindergarten and going through the high school. Vacation schools can give this sort of instruction to great advantage. It must be confessed that it is an expensive kind of instruction; but this is one of the places at which more money should be spent.

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In order to keep good a large staff of teachers employed by a city or town, a system of retiring allowances for teachers is indispensable. It is the American practice to keep in office superannuated or partially disabled teachers who have served long and well, and to pay them their salaries until death or complete disability overtakes them. This practice is uneconomical and very injurious to the children who come under the charge of such partially disabled or senile teachers. It is considerate toward the few veterans, but very inconsiderate toward the hundreds of children whose education is impaired. A proper pension system gives the managers of a school system the means of retiring such teachers, and of replacing them by fresh, well-selected appointees, without causing any hardship or wounding any feelings. A good pension system is not expensive; for when an old teacher retires on an allowance the retirement will ordinarily give rise to several shiftings of place, and the vacancy really filled is one near the foot of the scale of salaries. There is a pension to pay, but there comes upon the pay-roll a newcomer's

salary which is much smaller than the salary of the teacher of long service. Pensions, or retiring allowances, would not therefore be the cause of a large new expenditure, but would instead bring about a large increase in the competency or efficiency of any urban school system.

* * * * *

An incidental effect of these changes would be the development of departmental instruction—that is, skilful teachers would teach one subject through several grades, instead of teaching all subjects for one grade. It was in 1766 that Harvard College—then no more than a good high school—abandoned the method of teaching all subjects to one class by one man. The American public school system bids fair to be nearly one hundred and fifty years behind Harvard College in adopting the departmental method—a method which develops in both teachers and pupils a growing interest in their work and increases greatly the personal influence of teachers, because the staying pupils work through several successive years under the same teachers. Another effect of this enrichment of the programmes would be the postponement for every individual pupil of the grave decision between studies which permit access to the higher institutions of learning, and studies which do not. The later this decision can be made the better for the individual, and the better for the schools; because a course of study which is preparatory to all possible future routes in education is sure to be a better course than the poorer of two courses, one of which leads on to the higher institutions and the other does not.

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Another additional expenditure which public schools ought to incur as soon as possible is a development of instruction in drawing. Drawing is a mode of expression which ought to be as universal as writing. There is no art, trade or profession in which it is not useful, and the enjoyment of life may be greatly increased by the habitual use of the pencil in sketching interesting objects of all sorts, natural or artificial. Time for drawing can be obtained in school programmes by diminishing the time given to penmanship. Instruction in one art will help the other, and of the two drawing is far the most instructive, since it trains the powers of observation and helps to make the retained impressions both accurate and vivid. It is an incidental advantage of drawing that it reinforces the teaching of geometry, and particularly of solid geometry. The comparative neglect of geometry is one of the most curious phenomena in American educa-

tion, when the importance of that subject in the mechanical and constructive arts in which Americans excel is duly considered.

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Lastly, the schools ought to be provided liberally with all appliances which can improve either teaching or administration, and with all service which can relieve the teachers of unnecessary bodily or mental strains. Such appliances are books, maps, charts, models, diagrams, lantern-slides and electric lanterns, telephones, collections of specimens, physical and chemical apparatus, casts, photographs, pictures, typewriters and pianos. To try to teach without these aids is like trying to stop a conflagration with buckets passed from hand to hand, or like starting for Chicago in a one-horse chaise instead of in the Empire State Express. The prevailing poverty of our schools in these respects is lamentable. At every stage of education, from the kindergarten through the university, an alert and progressive teacher can save his or her own time and energy by transferring the mechanical or routine parts of his or her work to an assistant who receives a much smaller compensation than the teacher. To save that valuable time and energy for the best work is the truest economy, yet this economy is seldom practiced. In both these respects American schools fall far below the standards of well-conducted commercial and industrial establishments.

I have thus enumerated various ways in which a greatly increased expenditure on American schools ought to be made. This audience of teachers may perhaps have observed that I have not said a word about raising salaries. That is because I do not consider that direction the best one for additional school expenditure. The teacher needs many other things more than higher pay—good light and air to work in, medical inspection and care for the school, all available assistance in the schoolroom, all useful apparatus for teaching—particularly that which appeals to the eyes and fingers of the pupils—relief from mechanical and clerical work, a better tenure, a pension at disability, and expert instead of amateur supervision. And on the other hand, the community needs to have the teacher a more intelligent, better-informed, robust and gayer person, that children will “take to” and wish to please, and that parents will be glad to have visit them in their homes.

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The lines of asterisks above indicate parts of the address that have been omitted because, although of great interest to public school teachers, they bear little or no relation to our special work of teaching the Deaf.

The Most Neglected Pupil—By Oliver P. Cornman, In *The Teacher*, November, 1902.

That the pupil properly designated as the "bright" pupil, as contrasted with the other two classes, the "dull" and "average," should be said to be the most neglected pupil of our schools and in need of sympathy for his unfortunate position or lack of opportunity in our educational system appears at first sight an absurd proposition. It would seem that on the contrary he is a very much favored individual, a subject rather for congratulation upon the bountiful generosity of nature toward him than of commiseration for his pedagogical hardships. The road to learning, it may be said, has been made easy for him by the very quality of his natural endowments, and as nearly a "royal" one as that road can be made. His less gifted brethren must toil painfully along to keep up with him at all. Some fall hopelessly behind and others perhaps drop out of the march completely, forsaking this road in early years for the daily toil of wage earning in the lower walks of life. Truly it would seem that the "bright" boy has nothing to complain of, while the miseries of the "dull fellow" are so obvious that they rightfully appeal to our sympathy and induce us to give him that special direction and assistance that his talented brother "does not need." Yet in spite of this view of the matter, or it should rather be said on account of it, the "bright pupil" is the most neglected pupil of our schools.

It is true that he "does not" need the same kind of sympathy that a defective or a sub-normal condition calls forth, nor the same kind of special attention that a backward pupil requires, yet he does need encouragement to put his talents out to usury, he does need the fostering care that will help him to fan into bright flame the spark of genius perhaps that would otherwise glimmer and go out. In short he does need, and of right should have the opportunity to develop the very best that is in him. That he is not accorded this opportunity by our graded system, an examination of the facts will show and justify our contention that not only is he the most neglected pupil of our schools, but that this neglect cannot be justified by the plea of expediency or economy, and least of all by the usual theory that it is necessary because only the majority (supposedly the "average" pupils) can be legislated for. If such legislation involves denial of "equality of opportunity to every pupil" it is fundamentally undemocratic, absolutely opposed to the true spirit of public education and positively inimical to the best interests of the State.

Leaving for the present the question of the "average" pupil and his treatment, let us compare the treatment of the "dull" with that of the "bright" pupil. That the former receives by far the greater proportion of the time and best thought of the teacher is well known to everyone intimately acquainted with our school system. This is partially due to the ease with which the "bright" pupil masters a course of study prepared for the average boy or girl, and the sympathy naturally felt for the more unsuccessful plodder. Moreover, even when this feeling is not an important factor in the determination of the teacher's conduct, the fact that her professional success is most frequently measured by her ability to promote the dull section of her class, leads to the same result—letting the "bright" pupils take care of themselves, while every refinement of method and a surprising abundance of patience is devoted to the great aim of getting the dull ones by hook or crook promoted. The opportunities of the "bright" pupil are thus sacrificed to the end of obtaining a high percentage of promotions.

The teacher is not only encouraged in this procedure by the emphasis placed upon percentages, but is often directly stimulated to do so by the utterances of pedagogical authorities and of those officially directing her work. It is not unusual to find in educational journals, to hear from the lecture platform or at regularly conducted teachers' meetings, the direction to devote special attention to the dull pupils, since the bright ones are bound to succeed anyway. This view is frequently thus expressed: "Any teacher can promote the first third of her class. It is the progress of the lowest third that is the real criterion of her ability." On the other hand, extraordinary success of a few pupils is more likely to be attributed to their own native genius rather than to the efforts of the teacher. No wonder then that the explanations of the teachers are brought down to the level of the comprehension of the duller pupils, while the bright members of the class are either patiently enduring a benumbed boredom, or find vent for their natural mental activity in devices of their own that have to be classed as disorder and breaches of discipline. Much of the apathy of some pupils and the badness of others is thus directly traceable to the relative neglect suffered by the brighter members of a class.

Not only does the sub-normal child receive the greater attention in the class-room, but he it is to whom the teachers devote so much extra time, specially coaching and instructing him in his deficiencies. What teacher has any surplus energy left for this kind of labor with the super-normal child? Yet if it be right for one pupil to be held up to nearly the full limit

of his capacity, the other should also receive the necessary stimulation to induce and require him to put forth his full powers.

Perhaps the most striking evidence of the difference of treatment accorded the dull and the bright pupil is seen in the effort to make extraordinary provision for the former by the establishment of special classes and special schools, in which carefully selected and higher salaried teachers are given charge of comparatively small numbers of pupils. The curriculum also in such cases is generally modified to meet the pupils' necessities, and he frequently enjoys the luxury of a manual training denied the regular school on the ground of its expense. It is true such special provision is made only for the very backward or defective pupils, but the extraordinarily gifted pupil is just as frequently occurring a phenomenon, yet we hear of no analogous attempts to secure for him the special consideration which the exceptional nature of his case with equal justice and with greater reason demands.

The writer goes on to show that the so-called average pupil also fares much better than the bright pupil, the course of study being designed to embrace what he might be expected to accomplish and the periods for review, examination, and promotion timed to meet his requirements. This is commonly justified by the claim that the majority are thus provided for, but it is easily demonstrable that while the average pupils are more numerous than either the very bright or the very dull, these two latter classes taken together constitute a majority of the whole number, so that the school ministers effectively to only a minority. As a remedy he recommends the adoption, according to which best satisfies local conditions, of some one of the following methods of grading suggested in the report of the Committee on School Organization of the New Jersey Council of Education:

“(1) Yearly grading with incidental promotion; (2) semi-annual interval method—semi-annual promotions; (3) short interval system. Interval shorter than six months; (4) grouping system, organizing the class into groups with reference to ability, and without regard to time interval; (5) parallel course system; (6) providing extra teachers for special pupils; (7) providing ungraded classes for pupils; (8) various combinations of foregoing plans.”

In schools for the Deaf the difference in the rate of advancement of the bright, the average, and the dull pupil is much greater than in ordinary schools, and the problem of grading is still further complicated by the fact that progress is so frequently irregular as regards the different branches of study. Some pupils, from the accident of having lost their hearing later in life than others, may average high in language and in those studies requiring primarily an understanding of language, and yet be very deficient in certain subjects and in the mental development they are intended to provide. To promote them under the usual method of classification means that they will always remain deficient in these respects, while to keep them back, compelling them to review in its entirety the work of the grade, cultivates in them habits of indifference, inattention, and indolence, from lack of necessity to exert themselves during a large part of the time, that will not only interfere with their future progress in school, but are in themselves defects of character that it should be the first and the constant aim of education to correct. As a matter of fact, the bright pupil of the lower grade seldom distinguishes himself in the more advanced studies, or does as well after graduation as those who were reckoned average or dull. The discipline of hard work does more to determine character and ultimate advancement than any amount of knowledge acquired from books or teachers. What is needed is a system of classification that will make it possible to give each pupil the instruction he requires in each subject of the course so that there will be orderly progress in the several branches and all may enjoy the full measure of mental and moral discipline from constant employment at tasks suited to their ability. This is most likely to be found in an arrangement of departmental teaching that will enable a pupil to take some subjects in one grade and some in another. S. G. D.

Dum-fool Things.—By Paul Piper, in *Booklover's Magazine*.

Latin is a dum-fool thing. I feel that way to-day. My boy works at Latin and he requires eighty per cent. of something to pass something else. I do the other twenty per cent. myself.

The new *French* pronunciation is what puts me at a disadvantage. When I was a boy *bonus* was simply *bone-us*, now it is *bone-use*; but when a thing is a dum-fool thing the way you say it doesn't matter. Isn't it time that our schools waked up to the fact that we can get along very well over here without Latin? If we must have it, give us three weeks of Latin roots from an old spelling book and let it go at that. The teacher told me upon enquiry that Latin gives a boy culture. I told him in two words that I didn't believe any such thing. You might as well scratch a boy's back to produce culture. I know from observation as well as from experience that Latin produces obstinacy, and crankiness, and deceit, and fickleness, and hatred, and indigestion, and lying, and sore eyes, and a strong tendency towards profanity. I admit that Latin has its place but it belongs with other Roman creations now dead. If we were the least bit short of studies there would be some excuse, but we're not. Put Julius Caesar and Cicero in the archives where they belong and let us translate Wordsworth and Tennyson and Abe Lincoln and Darwin. These younger men said something and they said it in fairly intelligent English. You don't need to scrape the paint off a picture to interpret the artist or to pick a flower to pieces to appreciate its beauty. There is only one thing dum-fooler than Latin and that is the educational system which thinks that Latin ought to be taught in American schools in the twentieth century.

I ran across another dum-fool thing at breakfast a few mornings ago. It was transitive verbs. They had gone through all the preliminary stages of mastication and were ready to serve. My little girl of a dozen years had a grammar beside her plate. Her eyes were swollen; her whole expression was one of much misery and discomfort. The sun was shining, the air was beautiful, and the morning was the kind that specially loves flowers and birds and children.

"Well, my dear," I said, "what is the matter?"

"Transitive verbs," she said.

"What are they?" I asked, and her answer came in one long sobbing breath. She evidently had repeated the definition a hundred times before leaving her room.

"A transitive verb," she said, "is a verb which expresses an action, a possession, or an ownership such as either literally or metaphorically passes from one person or thing called the subject to another person or thing external to the subject upon which it terminates."

"Great heavens," I said, "let me see the book!"

Sure enough there it was; printed in bold face type to indicate its importance.

"Well, child," I said, "I'm glad it *terminates*."

My wife had many times before cautioned me about expressing my opinion on education and religion and other abstract things before the children. A warning glance was sufficient. I didn't say anything out loud for a minute or two, but after the children had gone to school I asked my wife to talk with the teacher and ask if the Lord's Prayer, or the 23d Psalm, or a little poem from Longfellow, or Eugene Field, or something else beautiful and sweet could not be substituted for transitive verbs.

My little girl had three pages of such tommyrot to commit to memory or in default of the same stay an hour after school. This is the twentieth century and the school is in a beautiful suburb of a beautiful city.

The lesson to be learned from the above is not that Latin and Grammar are "dum-fool things," but that they may be taught in a "dum-fool" way. There are numerous laymen and some teachers who would emasculate the school course by doing away with all studies that require thought and effort on the part of the pupil. The task should be proportioned to the strength and the method adapted to the mental state of the child; but a rational course of instruction must provide for the development of all the intellectual faculties and in such a scheme Latin, Grammar, and many other subjects condemned by amateur educational reformers, have their proper place. The question should be how and when to teach them to the best advantage. To limit a child's education to the Lord's Prayer, the 23d Psalm, the poems of Longfellow and Eugene Field, and similar "sweet and beautiful things," would be to equip him very imperfectly for either the intellectual life for social and business advancement.

S. G. D.

Wanted—Men in the School System.—Editorial in *The Teacher*, December, 1902.

In Philadelphia more than 93 per cent. of the teaching force in the public schools consists of women, and a similar preponderance of women over men teachers obtains in general throughout the United States. The disproportion is becoming even

more marked. The report of State Superintendent Schaeffer, e. g., shows that during the year ending June, 1902, there was a decrease of 609 in the number of male teachers and an increase of 1205 in the number of female teachers in Pennsylvania. The causes and effects of the tendency thus evidenced should be carefully studied, for the problem of inducing men to enter and remain in the profession cannot be neglected much longer. Unless some effective remedy be found, there is danger that the now very small percentage of male teachers will be so greatly reduced that the schools will be practically under the almost exclusive direction and control of women. We speak of this as a danger without in the least implying anything derogatory to the merit of women as teachers, nor to the value and necessity of their influence in the school system. The danger is that of a one-sidedness of training for the child. For without raising the question of the comparative merits of men and women as teachers, it must be conceded by everyone that they are different and make different kinds of impressions upon their pupils. The male teacher will have a certain influence upon the children that a woman cannot exert, and the latter will bring to bear influences that the man plainly lacks. These influences are, to a great degree, complementary; the child needs not one alone, but both; otherwise he cannot secure the many-sided ideals and harmonious development that are the ideals of the whole system of education. We believe that the girl as well as the boy needs the influences of the male teachers, but however this may be, there can be no question but that under present conditions the education of the boy is too overwhelmingly feminine.

It is undoubtedly the sense of the community that boys of grammar school age at least should have over them a greater number of men teachers. In private schools, where the selection of teachers is dictated solely by considerations of business expediency, head masters are the rule and a much larger proportion of male assistants is employed than in the public schools. In consequence of this in some parts of the country boys are being withdrawn in noticeably large numbers from the public schools in order to be sent to private institutions, where they may receive the kind of training which the public schools are either unable or unwilling to afford. Men are so greatly needed in the schools, the demand of the public is so unmistakable, that to induce men to enter or continue in public school work has become one of the most important problems of modern educational administration.

French Multiplication Table.

Below is a modified form of the French multiplication table:

2	2										
	4										
3	2	3									
	6	9									
4	2	3	4								
	8	12	16								
5	2	3	4	5							
	10	15	20	25							
6	2	3	4	5	6						
	12	18	24	30	36						
7	2	3	4	5	6	7					
	14	21	28	35	42	49					
8	2	3	4	5	6	7	8				
	16	24	32	40	48	56	64				
9	2	3	4	5	6	7	8	9			
	18	27	36	45	54	63	72	81			
10	2	3	4	5	6	7	8	9	10		
	20	30	40	50	60	70	80	90	100		
11	2	3	4	5	6	7	8	9	10	11	
	22	33	44	55	66	77	88	99	110	121	
12	2	3	4	5	6	7	8	9	10	11	12
	24	36	48	60	72	84	96	108	120	132	144

Several advantages are apparent. There are 66 products instead of 144. This is due to the omission of unnecessary statements (such as “one 5 equals 5”), and by regarding either factor of any product as the multiplicand or the multiplier, e. g., 84 in the last row of products is regarded as either 12 times 7, or 7 times 12.

In having pupils make the table, the prominent numbers are at first regarded as multipliers. Each new product is then obtained by adding the multiplicand to the product just above. It is easy to make pupils understand how to find 8 times 6, for it is simply a matter of adding one more times 6 to the 42 (or 7 times 6) on the line above.

The proximity of the multiplicand and the product is helpful in fixing the recurrence of figures in the rather easy products of the ten and eleven lines. In the nine line, it may be made especially useful, for it shows very plainly that the tens digit of the product is always one less than the multiplicand, and that the sum of the digits is always nine. A reference to this curious fact is usually sufficient to fix the troublesome nine table in the pupil’s mind in a single lesson. Other advantages will be evident upon consideration.

THE INSTITUTION PRESS.

The Development of the Senses.

The exercises for the training of sight and touch which are given at the Northampton school, are used, first, to quicken the perceptive faculties; second, to cultivate the habit of accuracy in seeing and feeling; and third, to discriminate, by immediately observing similarities of differences and relations, always remembering that attention is the underlying condition for the proper development of these functions.

Some of the first exercises that are given are to train the sight, as movements of the whole class, as running, walking, bowing, etc., and gymnastics of the arms, hands, face and tongue, leading to articulation.

Colors are matched in similar and dissimilar objects as blocks, ribbons, sticks, etc. Geometrical solids, blocks, and balls of similar shape but dissimilar size, are recognized.

The number of spots on a block is recognized, and the pupil is required to hold up the number of cubes to illustrate the number of spots on the block.

To develop touch, a number of objects are seen, then recognized by touch, or a number of objects are felt then recognized by sight.

Pieces of satin, wool, silk, plush, etc., are stretched across a hoop and a pupil being blindfolded, recognizes the texture, between his fingers.

The same materials are pasted on a card and the surface is distinguished by touch.

Strings, loosely twisted cords, closely twisted cords, fine wire, thread, etc., are given to the pupils to find duplicates on a board.

A child puts his hand on the bridge of a guitar, and tells by the vibration which string was struck, and he also distinguishes between a slow and a rapid vibration.

These exercises lead to a distinguishing of vibrations in the larynx.

For older pupils, it has been found an interesting and valuable practice to measure upon the blackboard various lengths, and with a standard of comparison in the mind to be able to distinguish the exact length of the lines—2 inches from $2\frac{1}{2}$, 5 inches from $5\frac{3}{4}$, 9 inches from 10, 2 feet, 6 inches from 2 feet 8 inches, etc. Strict attention will fix the various lengths in the mind.

In another exercise, ask the pupils to turn to a certain page of a book, to look at the first two lines for a single moment, close the book, and write the lines, using capitals, punctuation marks, etc. Whole paragraphs may be produced in this way after a single reading.

Many gems from literature could be memorized in a short time, if tried in this way. If this state of attention could be reached among our pupils, it would save a vast amount of fatigue, and much time would be secured which is too often wasted in the miscalled study hours.

Such habits of the mind are a thousand times to be preferred to the carelessness of the untrained scholar who is content with a superficial glance and rests satisfied if the result of his observation is almost correct.

In giving short exercises, give them but once, as there is not the stimulus to attention when repetition is expected.

In our manual classes, this applies to finger spelling, and in our oral classes to speech.

If a pupil knows that a command will be spelled or spoken two or three times, he will not pay as much attention when it is given the first time as he would if he knew that the command would be given but once—Extract from a paper read by Miss Cooper before the Teachers' Association of the Council Bluffs School and printed in the Iowa Hawkeye.

National Educational Association.

It has been suggested again, this time by Superintendent Tate, of Minnesota, that it would be well to hold the Convention of American Instructors of the Deaf at the same time and place as the meeting of the National Educational Association. It would be well, indeed. Not, however, from the standpoint of the man who is apprehensive that the public may conclude, from the manner in which the Department of Special Instruction is conducted, that the country has adopted the oral method of educating the deaf, but from the broader view that the more the public knows about the work of our schools, the quicker and the more certain will English become the established medium of communication between teachers and pupils.

It is not so very long ago since leading American educators of the deaf brushed aside the claims of oralism as being of doubtful value. Not only did they belittle its importance, but they received it with marked indifference. To-day all their apathy has disappeared. Every institution has one or more classes in speech and speech-reading, and the condescension of old has given way to the growing fear that unless some counter-acting influence is set at work, it may be thought by the public that the country has adopted oralism. It is altogether too late to rest any hope upon such a doubtful possibility. Oralism is here. It has already been adopted, not by one school, but by every institution in the land. Oralism is just as necessary to the success of the combined system as is the manual alphabet, and it is infinitely more so than the sign-language. Yet some zealous advocates of the combined system and warm supporters of the sign-language still contend blindly against oral work, just as their predecessors did fifty years ago.

What would be the status of our institutions a few years hence, if they should persistently refuse to teach speech to their pupils? Why, the results to be seen at Northampton, in Boston, Chicago, and in many other places, would eventually either establish new managements, or close their doors. Now let us ask, what would be the intellectual, moral and social standing of our institutions, if teachers and pupils were resolutely refused permission to use the sign language? There wouldn't be any closing of doors or changing of managements. The constant practice in English would increase mental activity, encourage closer fellowship with our great authors, and make more simple to pupils understanding the beauties of literature, facts of history, and the problems of mathematics. The deaf child who has come to understand the English language has by that very fact been uplifted. What were his idle moments before, change to busy hours, and corrupting loss becomes moral gain. Besides, knowing the meanings of words, deaf children, as a rule, would blush to put in words that which they might find easy to communicate in signs. English is the common basis upon which the deaf must meet the

hearing. It is the vernacular of the American people, and the better the deaf man can use and understand it, the wider open becomes the doors of social enjoyment, business preferment, and political independence.

Nothing would be better than to have the convention of American Instructors of the Deaf meet with the National Educational Association. These matters could then be discussed before men and women who are unrestrained by traditional heritage, untrammelled by ties of association and friendship, and free from the barriers of selfishness. Just now, however, the chances are too remote to hope for such a blessing. When the union does come, the sign language will be put upon its trial before a jury that will convict, and oralism will be convicted by the evidence of those who appear against it, that "speech and speech-reading of the highest order are taught in combined system schools." To commend oral instruction is to commend the combined system as it obtains to-day, but some seem to think that to commend oralism is to condemn the combined system.

There are certain deaf children who cannot learn to speak well. This constitutes in the minds of some the failure of the oral method. There are many deaf children who, after several years' attendance at school, learn to sign well, and that is about all. This, by the same some, is probably looked upon as demonstrating the success of the combined system. The term combined system is a screen behind which a man practicing any method can conceal or defend himself. What is needed to right matters is first, a proper classification of methods so that a school using signs will be known as such, and schools using other methods will be known for what they really are; second, joint meetings of the Convention of American Instructors of the Deaf and the National Educational Association.—The Mentor.

Correlation of Studies.

A recent article in our scholarly contemporary, *The Mentor*, dwelt on the importance of the correlation of studies. For instance, in telling what he knows about plant-life the pupil should be trained to use English with the same care as in his rhetorical exercises; his study of geography should be so directed as to remind him of the facts of history, of zoology, of politics and government, of trade movement, which he knows anything about.

Strangely enough, to our way of thinking, the writer says that arithmetic is of all the common branches the hardest to bring in relation with other lines of study. To us it seems the one immediately practical thing—after reading and writing,—in our school work. The botanical development and geographical journeyings of a bunch of bananas are no doubt interesting, if skillfully presented, to a school boy, but the fact of supreme importance to him in this connection is the fact that three bananas can be bought for five cents.

He has a healthy curiosity to know how tall he is, how much he weighs, how far he can jump, how long he can hold his breath. His inquisitiveness as to the cost of everything he sees or hears about will lead him to figure eagerly on data judiciously supplied by his teacher. The application of figures to the facts of geography and history does as much to clarify the situation as does the use of the scales in chemistry. For instance, what conception has a grammar school pupil of the straightness of Sherman's army at Chattanooga? But let him figure out the weight

of daily rations of 100,000 men and forage for 20,000 horses, of ammunition and clothing, and he will begin to see what the problem of transportation means in military matters.

If it be true that, in teaching, the pupils should be the centre around which facts should be grouped, then arithmetic, it seems to us, is the centripetal force which keeps these facts all in their proper stations.—Alabama Messenger.

Our Alabama friend, as usual when it comes to considering questions relating to the education of the deaf, makes a correct diagnosis of the case. Not only do other branches of study as such involve arithmetic to a greater or less extent but the practical relations of life are few that do not require a knowledge of numbers or their manipulation. Moreover, arithmetic is invaluable in the teaching of language; aside from appealing to the interest of the child in many ways—we can hardly conceive of a period so early in the development of the mind that number in some form has not a fascination for the normal—it brings into use many of the common everyday phrases, and being an exact science it requires correctness of expression. No other study is so useful in breaking up a loose, shuffling habit of expression. Clear thinking precedes and induces exact statement. No class of children need the aid of the corrective force of arithmetic in their use of English more than the deaf. For this reason, if no other, we have always been an advocate of teaching English with numbers from the ground up.—Lone Star Weekly.

Verbal Husks.

“The ambition on the part of a few teachers,” says the Lone Star Weekly, “to cram their pupils with verbal husks finds no favor with us. It is more essential that a child can use intelligently the words he knows than that he be possessed of a long list learned by rote.”

In truth, the vocabulary of a deaf child early becomes one of the least important features of his education. When he gets into the way of using language, he rarely has any difficulty in acquiring all the words he needs. A most serious objection to the teaching of words for the sake of the words themselves is that it prevents the acquirement of those meanings and shades of meaning which become apparent only when the words are used in sentences with relation to other words. If he will stop to think of the matter, the teacher will remember that it is not once in three times that he is able to define a word for a deaf child until he has seen the connection.—The Silent Hoosier.

The Hard-of-Hearing in Public Schools.

The number of people in almost every community with defective hearing is probably larger than any one imagines. The result of an accurate enumeration of such would doubtless greatly surprise everybody. To secure reliable statistics along this line would not be an easy matter. The only way it can be done is by expert examination of each individual. That is not likely soon to be undertaken. Data are sometimes secured in the examination of applicants for enlistment in the army upon which a guess may be made. But it can be only a guess, and even that is liable to be far from the mark, as men who are perceptibly hard of hearing do not make application for enlistment, knowing that they would be rejected. Another thing that makes guesses upon such data uncertain is the fact

that there is a larger per cent. of defective hearing among the old than among those of enlistment ages. The difficulty of obtaining reliable statistics, however, ought not to discourage the undertaking. Especially is it important to secure data concerning school children. Such data will guide parents and friends of the children in planning their future. There are, moreover, a number of children in the public schools whose hearing is so deficient as to retard their scholastic progress. They are often looked upon as dull pupils and eventually allowed to fall by the wayside. Sometimes, after thus fruitlessly spending their earlier and most impressionable years, they drift into schools for the deaf. With fixed habits, stolid minds and discontented dispositions, they are misfits and often a source of no little trouble to our schools. Had they been admitted earlier they might have proven shining lights in their classes. Perhaps every school in the country has had experience with such pupils. Ours has had quite a considerable. This year we admitted half a dozen who have almost reached the age and stature of maturity but whose mental development is largely a matter of the future. We are glad to know that at the Minneapolis convention of the National Educational Association, Department XVI, composed of teachers of defective classes, took steps to secure statistics of defective hearing and sight among public school children. A committee was appointed, who will endeavor to obtain necessary data from the records of the National Bureau of Education complete returns. Undoubtedly the result of their labors, if thoroughly performed, will be of great benefit.—Lone Star Weekly.

Language and Education.

We are entirely in accord with the Mt. Airy World in the stand it takes that it is unfair to question the education of a person merely because grammatical or orthographical errors are noted in that person's writing. The fact that a person can write in strict accordance with all the rules of grammar, can spell to suit Webster or the Century, and can dot all his i's, cross all his t's, and place all commas, periods, etc., correctly, is not to be taken as indubitable proof that he is better educated, in the broadest meaning of the word, than one who occasionally slips up and falls down on grammar, orthography, and punctuation. True education implies more than a polish to the English language. It includes common sense, the ability to think and reason, to recognize and make the most of one's opportunities. The use of correct English is *prima facie* evidence of good training along that line, but it not infrequently happens that one whose English is faulty at times has a broader knowledge, both of books and of people and things. In some cases lack of aptitude for a perfect mastery of language may be inherited, though the person may be fully endowed in all other respects. Such a person may attain a high standard of education, and if possible devise plans by which said bureau may secure more education as regards other knowledge, and still be faulty in the use of language.

The Companion has more than once protested against the tendency, in the discussion of methods of educating the deaf, to regard the acquisition of written and spoken English as if it were synonymous with education. Language is certainly the most facile means towards gaining an education, but it is only a means to an end, and there is danger, if we give too much attention to this means, that we may overlook or neglect other matters that have an important bearing on the end we are striving to attain.—The Companion.

EDITORIAL.

Our New Departments

In this number of THE ASSOCIATION REVIEW we introduce two new departments, "Current Educational Literature" and "The Institution Press." In the former it is proposed to reprint such articles and extracts from articles appearing in educational publications or elsewhere as may be interesting and helpful to teachers of the Deaf, though not written with reference to their particular work. To confine our study to what is being done in schools for the Deaf is to be less and to accomplish less than we might with fuller knowledge and a broader outlook. Our aims are one with those of teachers of normal children; our special methods are based upon general methods. The more we know about the science of pedagogy as a whole, the better fitted we shall be to adapt its teachings to the needs of our pupils. In our own little field there are few men and women who may serve as leaders in educational thought and action; outside there are many who have devoted themselves to the solution of problems similar in their essence to those that vex and hinder us. Should we not avail ourselves of their experience? We believe there are those who will welcome this department as a convenient and economical means of doing so.

The department of "The Institution Press" will contain articles reprinted from papers published at schools for the Deaf. Many of these sheets are edited by teachers and other teachers write for their columns. The contributions on educational topics are sometimes of much value, but they are largely wasted because the papers are read by few teachers outside of the schools from which they are issued. Through this department of THE REVIEW they will be given a wider circulation and a place in the permanent literature of the profession.

Another innovation that we think will contribute to make THE REVIEW more interesting and valuable to teachers is the

publication of signed editorials by leading men and women of the profession. The time of many teachers is too fully occupied to permit the preparation of lengthy articles, but it is possible to put in three or four hundred words the salient points of an argument or an idea and, by stimulating thought and discussion, to contribute largely to the advancement of our work. We hope to receive numerous such contributions for future numbers. The one in this issue on "Self Criticism" will serve as a good illustration of what is desired.

S. G. D.

Self Criticism

Is there a single teacher of us all who does not feel a sinking sensation beginning somewhere in the region of her throat and ending—well in her *boots*, when the principal ushers in "Mr." or "Miss" So-and-So of the Blank Institution for the Deaf?" The work we are doing may be absolutely necessary for the particular children under our charge, but oh! how far behind the third grade it must seem to Miss So-and-So, whose second-year pupils grappled successfully with far more difficult matter at the last Association meeting. An explanation seems like an apology, a statement that the class is a slow one looks like an attempt to shift the blame from the teacher to the children, and a sudden change of program to exercises which will give the children a chance to do themselves justice is rather apt to end disastrously, because the young mind does not take kindly to jerks. "There is no misery so great as the misery of conscious weakness," and that is what we experience when Miss So-and-So departs with cordial thanks and gracious praise.

There is no real remedy for these trials, but there is a course of treatment which renders a teacher's system somewhat less liable to acute attacks and directions for this treatment are herewith offered:

Prepare a day's program with customary care: it is especially essential that no unusual preparations be made. Meet an imaginary visitor, who represents the best teacher in your line of work in your country, take her upstairs with you, seat her where she will be able to see and hear everything, and then

go to work. Straighten out your desk, which ought to have been attended to the night before, if you must, get your materials ready if it is your custom so to do, make such explanations as you deem necessary, and then welcome the children. When the lessons begin do the very best that in you lies from period to period, and as you go on watch every incident of teaching and learning, discipline and behavior, with the eyes of that invisible visitor in the corner. At the end of the day, in your character of visitor, tell yourself, in your character of teacher, what you really and truly think of yourself. Conduct your class for a month in accordance with such changes as your visitor may have caused you to adopt and then entertain her for a day again.

This treatment is warranted to help, though not to cure.

MABEL ELLERY ADAMS.

**Public Gifts
in 1902**

According to Appleton's Annual Cyclopaedia, the donations by wealthy and public-spirited Americans to educational, charitable, and ecclesiastical purposes amounted, during the past year, to over \$85,000,000, not including the \$18,000,000 contributed to foreign missions and the large aggregate of gifts of less than \$5,000 each. There are also excluded the \$10,000,000 with which John D. Rockefeller proposes to endow a General Education Board, the \$8,000,000, donor's name not given, which will provide for the consolidation of Rush Medical College with the University of Chicago, and the indefinite sum which it is reported Henry C. Frick will expend in the creation and endowment of a university in Pittsburg that will be a larger and wealthier institution than the Polytechnic School for which Andrew Carnegie set apart \$5,000,000. John D. Rockefeller gave over \$5,000,000 to various universities and colleges. Andrew Carnegie's donations to libraries and to higher educational institutions amounted to nearly \$3,000,000. Other notable gifts were \$4,000,000 bequeathed to the hospitals of Boston by P. B. Bingham, \$4,000,000 by John M. Burke of New York for a home for convalescents, \$4,000,000 by Mrs. Crossman Riley of New York for a

home for aged men, and the \$2,000,000 spent by P. A. B. Widener of Philadelphia in the erection and endowment of a training school for crippled children.

A perusal of the list of benefactions shows the high favor in which educational institutions are held by the wealthy, and one is further impressed by the fact that their gifts are, with a few insignificant exceptions, to universities and colleges. It does not appear to have occurred to any of them that the cause of higher education would be best subserved by better provisions in the primary and secondary schools. There is not one of these, whether public or private, that could not use to advantage many times the amount of money at its disposal. The appropriation the most liberal and prosperous of commonwealths can make for the support of its schools is insignificant compared with their needs. The money spent by Carnegie on public libraries would accomplish far more good if devoted to the establishment and maintenance of school libraries. Gifts of educational apparatus, provisions for special teachers, for the retirement of superannuated instructors, and numerous other purposes for which funds are not regularly available, are proper channels of expenditure for those who wish to put their superfluous wealth to the best use.

Schools for the Deaf are also deserving objects of benevolence that are almost entirely neglected. No other educational institutions make as large returns to society or to their pupils. The state appropriation usually suffices for ordinary expenses, but money is needed for development along many lines. With proper endowment they could pay salaries that would attract more capable instructors, could improve the industrial training, and could purchase books and apparatus that would greatly increase their efficiency.

S. G. D.

Homophenous Words

In this number of the Review we print the first installment of a long list of homophenous words. The task of compiling it has been an onerous one and the lady who undertook it and has so ably carried it to completion deserves the thanks of teachers and of

the adult Deaf who will find in it a means of improving their lip-reading. The first thought on noting the great number of words that, so far as their appearance on the lips show, may stand for any one of several other words, is that lip-reading must be a hopeless task, but a study of the list will show that this is far from being the case. The fact that almost all the words similar in appearance are very dissimilar in meaning and can seldom be used with the same context makes the occasions on which one who has learned to read by sentences, not by words, is likely to be misled, very rare indeed. Moreover, a review of this list with the aid of an expert lip-reader has demonstrated to us that many of the words given as similar, while having the same, or approximately the same, appearance so far as lip formation goes, can be recognized, without any context, by the expression of the face and by certain movements of the muscles of the throat and cheeks. By pronouncing the words before a mirror, adult lip readers will learn to note these differences for themselves and thus come to distinguish the words more readily and cultivate the closeness of observation that is essential to proficiency in the art.

S. G. D.

**Wisconsin State
Inspector**

The retirement from office of Mr. W. D. Parker, Wisconsin State Inspector of Schools for the Deaf, is greatly to be regretted. The intelligent interest he has taken in the education of the Deaf and the ability and energy with which he has discharged his duties have won for him the respect of the profession, while the practical results of his administration have more than justified the creation of this office. We learn that the new State Superintendent of Instruction, Mr. C. P. Cary, has appointed Miss Anna Schaffer, of Chippewa Falls, to succeed him. We extend a hearty welcome to Miss Schaffer and hope she will be able to accomplish much good, not only for the Deaf of Wisconsin, but for those of other states where the experiments there being made are watched with deep interest.

S. G. D.

THE ANNALS STATISTICS.

The American Annals of the Deaf for January, 1903, Vol. XLVIII, pp. 56 to 72, presents its usual annual tables of statistics concerning the pupils and teachers in American Schools for the Deaf present November 10, 1902.

The number of schools increased from 118 in 1901 to 123 in 1902, an addition of five, of which four are day schools and one a denominational or private school.

A decrease of 76 is shown in the number of pupils in school, the total for 1901 bring 11,028 and for 1902, 10,952. This decrease is apparent rather than real, as the West Virginia School with 158 pupils reported in the 1901 tables, gives no statistics for 1902.

The number of pupils taught speech (column A) increased from 6,988 in 1901 to 7,017 in 1902, an addition of 29, while the number taught wholly or chiefly by the oral method (column B) is shown to have decreased from 5,147 in 1901 to 4,888 in 1902, a reduction of 259.

The number of academic teachers increased from 1,027 in 1901 to 1,039, an addition of 12. The number of articulation teachers increased from 641 in 1901 to 664 in 1902, an addition of 23. This is an increase of 3.6 per cent. in this class of teachers. The articulation teachers of the country now comprise 63.9 per cent. of the entire body of academic teachers employed: a year ago the percentage was 62.4.

The following tables give the footings of the Annals' tables for the years from 1893 to 1903 inclusive, with percentages computed from them. (See also tables published in the THE ASSOCIATION REVIEW, June, 1902, p. 293 and pp. 300 and 301.)

SCHOOLS FOR THE DEAF IN THE UNITED STATES.

Statistics from the *Annals*.

Year	Total Schools	Total Pupils	Number of pupils Taught Speech			Percentage of pupils Taught Speech		
			A	B	C	A	B	C
1893.....	79	8304	4485	2056	80	54.0%	24.7%	0.96%
1894.....	82	8825	4802	2260	109	54.4%	25.6%	1.24%
1895.....	89	9252	5084	2570	149	54.9%	27.7%	1.61%
1896.....	89	9554	5243	2752	166	54.9%	28.8%	1.74%
1897.....	95	9749	5498	3466	162	56.4%	35.6%	1.66%
1898.....	101	10139	5817	3672	116	57.4%	36.2%	1.14%
1899.....	112	10087	6237	4089	128	61.8%	40.5%	1.27%
1900.....	115	10608	6687	4538	108	63.0%	42.8%	1.02%
1901.....	118	11028	6988	5147	73	63.4%	46.7%	0.66%
1902.....	123	10952	7017	4888	63	64.1%	44.6%	0.58%

A, taught speech; B, taught wholly or chiefly by the Oral Method; C, taught wholly or chiefly by the Auricular Method.

INSTRUCTORS OF THE DEAF IN THE UNITED STATES.

Statistics from the *Annals*.

Year	Not including Industrial Teachers			Including Industrial Teachers		
	Total Teachers	Articulation Teachers		Total Teachers	Articulation Teachers	
		Number	Percent- age		Number	Percent- age
1893.....	765	331	43.3%	....	...	.....
1894.....	784	372	47.4%	....	....	.....
1895.....	835	397	47.5%	....	...	.....
1896.....	879	427	48.6%	....	...	.....
1897.....	928	487	52.5%	1188	487	41.0%
1898.....	949	530	55.8%	1253	530	42.3%
1899.....	986	561	56.9%	1309	561	42.9%
1900.....	1010	588	58.2%	1353	588	43.5%
1901.....	1027	641	62.4%	1385	641	46.3%
1902.....	1039	664	63.9%	1388	664	47.8%

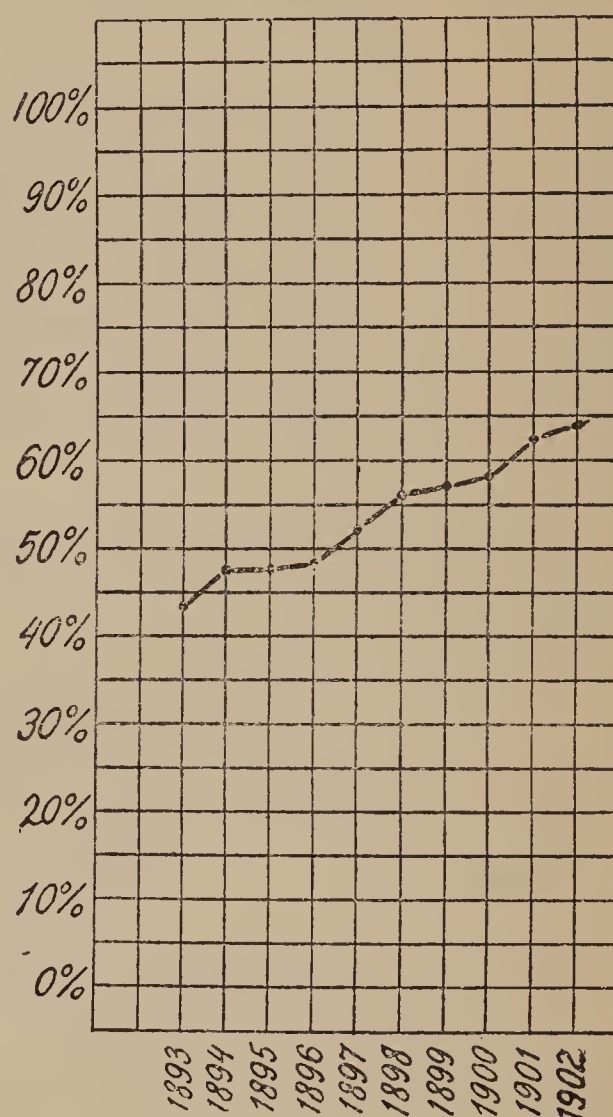
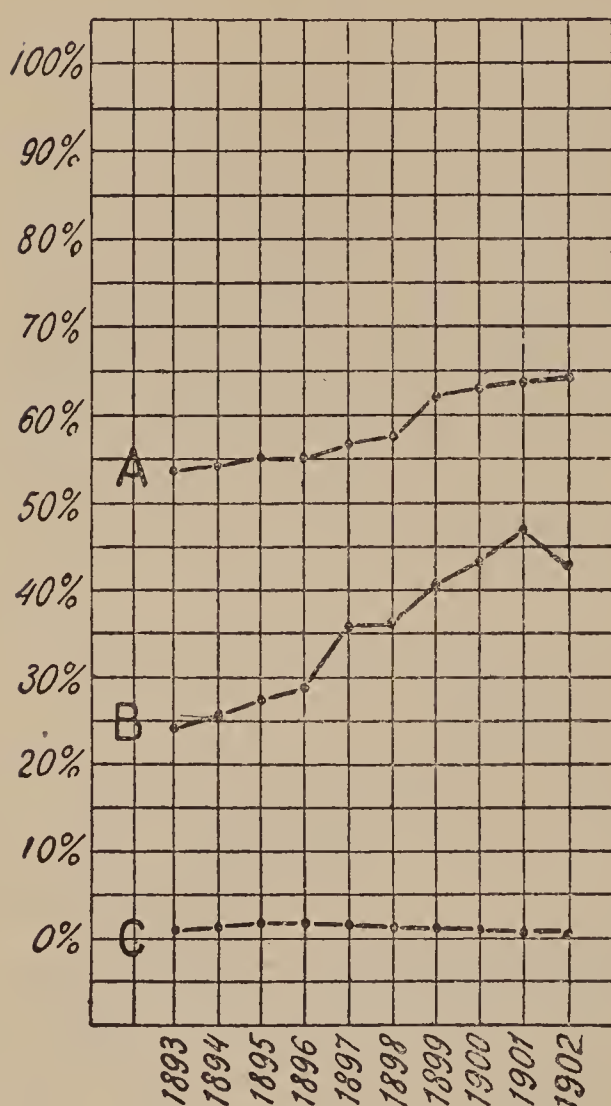
Six additional schools are reported by the *Annals* located one in Chicago, one in Racine, Wis., one in Rhinelander, Wis., one in Galena, Ill., one in Calumet, Mich., and one in New York City. One school in Manitowoc, Wis., is omitted, having been discontinued.

The foregoing tables are, in the direction and measure of the changes that they show, illustrated in the following diagrams:

SPEECH STATISTICS FROM THE ANNALS GRAPHICALLY SHOWN.

Percentage of Pupils Taught Speech.

Percentage of Academic Instructors who are Articulation teachers.



Pupils (A) taught speech; (B) taught wholly or chiefly by the oral method; (C) taught wholly or chiefly by the auricular method. F. W. B.

We regret to learn that Dr. Job Williams, Principal of the American School for the Deaf at Hartford, is suffering from ill health, and has been compelled to go to Arizona to recuperate. His Board of Directors has granted him six months leave of absence, and Dr. Gilbert O. Fay will be acting principal during that time.

Porto Rico is to have a school for the deaf. A band of Sisters of Mercy of the Order of "Mission Helpers" recently sailed from New York to open and conduct such an institution on the island.

MEETING OF THE BOARD OF DIRECTORS OF THE
AMERICAN ASSOCIATION TO PROMOTE THE
TEACHING OF SPEECH TO THE DEAF.

An adjourned meeting of the Board of Directors of the American Association to Promote the Teaching of Speech to the Deaf was held at the residence of Dr. Alexander Graham Bell, in Washington, D. C., on January 10th, with the following present: Dr. Bell, President; Mr. Z. F. Westervelt, Secretary; Dr. A. L. E. Crouter, Miss Caroline A. Yale, Mrs. Gardiner G. Hubbard, Mr. Edmund Lyon, Miss Sarah Fuller, and Mr. Davidson, representing THE ASSOCIATION REVIEW.

After the transaction of routine business, the following resolution was adopted:

WHEREAS, All American schools for the Deaf are distinctly educational in character, being an integral part of the great school system of this Country; Therefore be it

RESOLVED: That placing the exhibits of these schools in the Department of Charities and Corrections at St. Louis is regarded by the Board of Directors of the American Association to Promote the Teaching of Speech to the Deaf as a serious mistake, and the Board earnestly request that the exhibits of schools for the Deaf be placed with the purely educational exhibits and separated entirely from the Department of Charities and Corrections at the Louisiana Purchase Exhibition, and they especially request this in behalf of all the day schools for the Deaf, which have at no time in their history been under the the direction of Boards of Charity, but have from the first been under the control of Boards of Education.

In consideration of the active interest she has always taken in the work of the Association and her contributions in money and personal efforts to the promotion of its objects, Mrs. L. S. Fechheimer was elected a Life Member, and it was directed that her fee be paid from the general funds into the endowment fund.

The Committee on Summer Meeting reported in favor of Bay View, Mich., for next Summer's meeting, but after careful consideration it was decided, on the recommendation of Western members of the Association, to hold it in or near Boston, to enable teachers to attend the meeting of the National Educational Association and to avail themselves of the reduced rates offered in connection therewith.

The Committee on Summer Meeting of last year was continued in office. It consists of Mr. Z. F. Westervelt, Dr. Joseph C. Gordon, Mr. Richard O. Johnson, and Miss Sarah Fuller. Miss Fuller will be in charge of local arrangements.

After a full and careful consideration of the advisability of establishing a summer school, the matter was referred back to the committee having the matter in charge, with the request that it make a report thereon at the Summer Meeting and that the whole question be submitted to the Association at large for consideration at that time.

The officers of the Association for the past year were re-elected for the ensuing year. They are as follows:

President, Alexander Graham Bell; First Vice-president, A. L. E. Crouter; Second Vice-president, Caroline A. Yale; Secretary, Z. F. Westervelt; Treasurer, F. W. Booth; Auditor, A. L. E. Crouter.

The following standing committees were appointed: Executive Committee, A. Graham Bell, A. L. E. Crouter, Caroline A. Yale, Mrs. Gardiner G. Hubbard, Edmund Lyon, and the Secretary, Z. F. Westervelt, ex-officio. Finance Committee, A. L. E. Crouter, term expires in two years; Edmund Lyon, term expires in three years. Necrology Committee, Miss Sarah Fuller and Mrs. Gardiner G. Hubbard.

It should be explained in connection with the resolution on the St. Louis Exposition that, in adopting it, the Board acted on definite information that the exhibits of schools for the Deaf and the proposed model school would be under the direction of the Superintendent of the Department of Charities and Corrections, Mr. Alvin E. Pope, who has resigned his position in the Nebraska School to accept this office. Dr. E. M. Gallaudet, Chairman of the Committee on exhibits of schools for the deaf, states, in a communication to the Washington Star, commenting upon the resolution, that there has at no time been any thought of classifying these exhibits with the Department of Charities and Corrections, and that space has been assigned them in the building designed for the Department of Education. S. G. D.

NEW MEMBERS.

The following named persons have been elected to membership in the American Association to Promote the Teaching of Speech to the Deaf by vote of the Board of Directors. The list includes those elected since the last report.

Andrews, Harriet V., 3123 Lexington Ave., Kansas City, Mo.
Baer, Morris B., 15 Courtland St., New York, N. Y.
Banford, Jessie, 86 Houston Ave., Muskegon, Michigan.
Bretz, Marie Annette, School for the Deaf, Mt. Airy, Philadelphia, Pa.
Calman, Henry L., 42 E. Twenty-third St., New York, N. Y.
Cannon, Daisy M., 1009 Fifty-fourth Place, Chicago, Ill.
Delafield, Lewis L., 1 Nassau St., New York, N. Y.
Eaton, Mary, School for the Deaf, Jacksonville, Ill.
Hamlin, Orpha L., 98 N. Pine Ave., Albany, N. Y.
Harrison, F. Barton, 43 Cedar St., New York, N. Y.
Herman, Mrs. Kate S., Olathe, Kansas.
Hough, Charles M., 550 Park Ave., New York.
Irvine, Sarah, School for the Deaf, Mt. Airy, Philadelphia, Pa.
Lee, Virginia, School for the Deaf, Danville, Ky.
Levy, Felix H., 115 Broadway, New York, N. Y.
MacVeagh, Charles, 40 E. Seventy-fourth St., New York, N. Y.
Makemson, Ethel, School for the Deaf, Austin, Texas.
Martin, Catharine E., Clarke School, 138 Ashland Ave., Chicago, Ill.
McGee, W. J., Washington, D. C.
McIver, C. D., Cave Spring, Ga.
Miller, J. H., 511 Park St., Walla Walla, Washington.
Owen, Helen, Streator, Ill.
Parker, Willard, Jr., 159 Front St., New York, N. Y.
Pearse, Lillian B., 6550 Yale Ave., Chicago, Ill.
Posey, Lillie, School for the Deaf, Austin, Texas.
Root, Ettie B., Moline, Illinois.
Rosenfeld, Wm. I., 18 Maiden Lane, New York, N. Y.
Schmidt, Amkea, Neuer Market 32, Emden, Germany.
Sister Philippe de Jesus, Inst. for Female Deaf, Montreal, Canada.
Taft, Annie E., Chestnut Hill, Mass.
Taylor, Annah S., 6550 Yale Ave., Chicago, Ill.
Taylor, Bernice, School for the Deaf, Austin, Texas.
Thomason, Pattie, School for the Deaf, St. Augustine, Fla.

LIFE MEMBERS.

Campbell, Mrs. A. M., Mt. Vernon, New York, N. Y.
Fechheimer, Mrs. L. S., 2359 Park Ave., Cincinnati, Ohio.

BLANK FORM FOR APPLICATION FOR ACTIVE MEMBERSHIP
IN THE AMERICAN ASSOCIATION TO PROMOTE THE TEACH-
ING OF SPEECH TO THE DEAF:

.....1902.

To F. W. BOOTH, Gen. Sec'y and Treas.,

7342 Rural Lane, Mt. Airy, Philadelphia, Pa.

*I hereby make application for Active membership in the
American Association to Promote the Teaching of Speech to the Deaf
for the year 1902.*

Enclosed please find \$2.00 for the year's dues.

Signed, _____

Address, _____

From Far and Near Graded Stories for Little Folks

FIRST BOOK

A Reader for younger children, compiled by the Committee on Publication of Stories, authorized by the Convention of American Instructors of the Deaf, to prepare a series of Readers, is on sale by the Publishers,

The American edition is being reprinted in Harrisburg, Penna.

**GEORGE M. MORANG & COMPANY Limited, TORONTO, ONTARIO, CANADA,
and BAKER & TAYLOR, NEW YORK, N. Y.**

The book contains many short stories, is fully illustrated, a number of the illustrations being in colors. The paper is of the finest quality and the letter press of the best and the binding attractive and substantial. The book will be sold to American Schools for the Deaf and to teachers of the deaf at **THIRTY-FIVE CENTS (35 cts.) a copy.**

COMMITTEE ON PUBLICATION OF STORIES.

MRS. SYLVIA C. BALIS, Chairman, Belleville, Ontario, Canada.

SUP'T WILLIAM A. BOWLES, School for the Deaf and Blind, Staunton, Virginia.

MR. GEORGE M. TEEGARDEN, 469 Ella Street, Wilksburg, Pennsylvania.

THE ASSOCIATION REVIEW.

VOL. V, No. 2.

APRIL, 1903.

THE EMPLOYMENT OF PARTIAL HEARING OF PUPILS IN INSTITUTIONS FOR THE DEAF.¹

W. MERKL, SPECIAL TEACHER IN THE LOWER AUSTRIAN INSTITUTION FOR THE DEAF, DOBLING, VIENNA.

It has been long a well-known fact that in our institutions for the deaf there are some children who have a normal sense of hearing; others who are more or less hard of hearing; and still others who are only in condition to hear vowel sounds.

Of late years exact experimentation has proved that among those heretofore considered totally deaf are a number capable of hearing a greater or less stretch of the musical scale. In consequence it was justly claimed that very few so-called deaf children are totally deaf, but, on the contrary, that the greater percent. have a certain amount of hearing. This fact established, certain investigators brought to light the old idea of utilizing this residuum of hearing power, and of training it by means of special exercises.

More especially since Prof. Dr. Urbantschitsch of Vienna and Prof. Dr. Bezold of Munich have brought the subject into the foreground, in many of the Austrian and German institutions for the deaf greater attention has been given to this interesting phase of the work. Systematic exercises for training the hearing have been worked out, whose aim is a threefold one; first, to increase the actual ability to hear; second, to give a better means of thought communication through an organic blending of the optical sensations of lip-reading, the motor sensations of articula-

¹Translated from the German by Miss Anna R. Camp, Chicago, Ill.

tion, and the acoustic sensations; and third, to improve the speech of the deaf, and make it more like that of a normal person.

Have these exercises fulfilled the hopes set upon them? The many differing opinions expressed seem to indicate that the aurists and teachers of the deaf are not agreed either about their real nature, or the results thus far obtained. While a number of doctors indulge in the greatest hope for the development of hearing, and foretell an extraordinary change in the present day method of instructing the deaf, others, as well as a great number of teachers, regard the whole thing as a waste of time and even go so far as to say that it is really harmful. Many instructors of the deaf do not deny that, given certain conditions, a definite amount of improvement can be gained through the use of special hearing exercises, but claim that the results thus attained have already been secured through the usual school instruction.

As it certainly is to the interest of the education of the deaf to throw as much light as possible upon this much discussed question, it may be of some help to describe the experience gained through an actual use of these hearing exercises in private cases, as well as in the class-room, and with those totally deaf, as well as with the merely hard of hearing.

In thus giving my own subjective opinion of the nature and eventful worth of these exercises, I desire simply to contribute something, however small, toward the furtherance of a good cause.

Emphasizing, as I wish to, that these exercises have been given to children totally deaf, as well as those with more or less hearing, the following experiment with one of the former cases may be of interest. A series of some twenty similarly constructed words were whispered into the ear. This exercise was continued for a certain time, with the result that finally the child was able to repeat these words correctly. This was a convincing proof that the result obtained was not gained through the sense of hearing, but through an extremely keen tactile sense.

Another child on entering the institute was apparently totally deaf, reacting to no vowel sounds spoken into the ear. Later, however, when under instruction the same child spoke with clearness, which argued the presence of hearing. As a matter of

fact the boy soon proved capable of perceiving vowels in both ears. Here is an excellent illustration of the fact that very often a certain amount of hearing exists of which the children are not conscious. Children of such a class, and those who by first examination display marked ability to hear vowels, show decided improvement in understanding speech through the ear, after a thorough training in hearing gymnastics. They are also capable of imitating rhythm and modulation of tone to a certain extent. Accordingly words often used in exercise will be correctly understood much more frequently and with less intensity of tone than unfamiliar words and those seldom used in exercise, which will be either misunderstood or confounded with others.

At first the memory for sounds is little or not at all educated. Little by little through exercise it is strengthened, and it seems certain that the thought process of children at such a stage will have as a basis, not only the optical image of the positions of the mouth, and the muscular sensations of the speech organs, but also that the acoustic image begins now to play a role.

Even in dreams sound images will be reproduced, as was the experience of one of my best pupils. I had given this child hearing exercises for a period of six months¹ when she related a dream of a locomotive whose whistling and snorting she had plainly heard. Even after six months of training, this same child began to perceive new sound sensations, such as street noises, sounds of bells, songs of birds, etc., sounds which previously she had not noticed, and which therefore had never come into the field of consciousness.

What is the cause of this increased power to hear speech which follows extensive exercise of the existing hearing? In what way has this been accomplished? Has the physical power of the hearing apparatus actually increased? Has the auditory nerve lately so torpid been aroused to new life?

Personally I am convinced that the results attained in certain cases may be traced back to a psycho-physical process involving, through determined effort, repeated enervations along

¹ Mr. Merkl has forgotten to state that this same child had had *three* years' training in hearing previous to her work with him, and had begun to notice all street noises, etc., *two* years previous.—Translator.

nerve paths, and coordinations through nerve centres, heretofore comparatively unused. It concerns itself with the training of what hearing still remains, and with the greatest possible use of the same in the service of the perception of speech.

Let us take as an example a child, from birth so hard of hearing as to be unable to learn speech normally through the ear. Since his idea of hearing sounds and words is very indefinite, when spoken to he makes little or no response. Inter-course with the family through sounds consequently soon ceases, with the result that the function of the hearing apparatus becomes still further impaired, and the complicated speech process remains quite unacquired. The nerve paths leading to the different nerve centers under consideration, namely the acoustic, and speech centers, the idea and motor centers, as well as the necessary arrangements for connecting these centers, remain unused, untraversed. Under such conditions this child will soon resemble one totally deaf, notwithstanding the hearing he still possesses. Similarly situated is a child who becomes deaf soon after he begins to learn speech. He, however, possesses the invaluable power of discrimination, that the memory of the acts of having heard preserves, and which happily can be made distinct when the hearing exercises are begun. Nevertheless in such a case the attention, and acoustic memory, as well as the nerves, are little exercised, and the connecting paths are not as accessible as in the case of persons with normal hearing, who have received thousands and thousands of impressions.

It follows then from the foregoing that an actual physical increase of the sensibility to sound does not necessarily take place as a result of the exercising and training of the hearing and speech functions through these hearing exercises.

What is then the real task of the auricular method? It aims at reestablishing the faculty of understanding speech through the ear. This faculty through disuse has remained uneducated or gone to waste, but, provided some capacity for hearing is present, it is capable of being increased up to a certain point. The greater the amount of hearing, and the greater the ability to hear tones of varying intensity, the greater naturally will be the result attained.

The effectiveness of the exercises also depends to a great extent upon the position of the scale of the tones perceived; for as we know from recent discoveries, each vowel and consonant has a certain place in the scale of tones. For instance, Prof. Dr. Bezold of Munich has established for the vowels the stretch "b—g."

In undertaking such auricular work what then is the principal point to be considered?

In my eyes it is the clearing up of the confused hearing sensations, the differentiation of sounds. This comes principally through great concentration of attention. Through determined efforts and through an increased attention it is possible to lift the sensation of hearing over the threshold of consciousness. Where this is not possible, speech can naturally not be the outcome of conscious hearing. When our attention is absorbed by other circumstances we do not notice the striking of the clock, whereas should we fix our attention upon the clock we are able to hear the sound very easily. Clearly it struck just as loud when our thoughts were elsewhere, and exercised just as great a stimulus upon our hearing apparatus. Is not the same process possible with a person hard of hearing? Should he listen with concentrated attention to hearing sensations would he not be able to perceive even stimuli of less intensity, outside stimuli which are not great enough to occasion any sensations, unless all other impressions are inhibited. It is certainly also an accepted fact that fixed attention in yet another way increases the clearness of hearing sensations. It creates better physical conditions for hearing by exerting an influence over the muscles controlling the hearing apparatus.

The vowels, whose acoustic resonances are greater than those of the consonants, will naturally be more easily differentiated. And again the voice consonants will be heard much better than the breath consonants. It is certain that the latter are seldom correctly understood, for with a lessened hearing it is almost an absolute impossibility to perceive them.

In such cases as I shall mention later, a skill in divining the meaning of a sentence from one or two words correctly heard takes the place of absolute hearing, and must be exercised as

much as possible. We need only to think how great a service this power of guessing is to us as normal persons. However, in order to possess this skill in guessing, there must be present in the mind a number of word images, which as apperceived images reinforce the perceived words.

It is then the second task of the hearing exercises to educate the acoustic centre and the word memory; to accumulate acoustic word images. Our familiar word images are compounded of sound sensations and the sensations of articulation. When these words strike our ears, the sensations thus produced will only be perceived when they meet and are reinforced by the images of sound sensations arising from the same impressions earlier assimilated. The greater number of these assimilated word pictures in the consciousness, the greater will be the power to understand through hearing. In this way we explain the fact that the hearing of our children keeps pace with the progress made in instruction, and with the increased intelligence developed through this instruction.

While speaking of this subject I will now mention that (in my opinion) a systematic instruction in hearing is in order only after completing a course in articulation; for the imitation of the sounds of speech are only possible when the articulation of those sounds has been practiced.

The elements of our speech are indeed sounds, but the structure of thought is formed out of the ideas of words. Words therefore must be principally exercised in order that their ever recurring combination of sounds may express certain experiences. An individual hard of hearing is in some sense in the same situation with one who is learning a foreign language, and who must submit to long continued exercises before he is in a position to perceive the new sounds, for which new pathways must first be worn.

An experience, which every one who has done auricular work will recognize, is, that persons with but little hearing are often able to understand only those who give them the exercises; a fact very easily explained, being merely a matter of individual differences in the formation of sound. Persons with normal hearing are similarly limited, for we must become ac-

customed to different voices, and often understand very little when some one is first introduced to us, to say nothing of the difficulty arising from faulty articulation which we sometimes meet.

The greater or less fatigue which quickly shows itself during the hearing exercises is striking and therefore worthy of attention. This fatigue indicates also the pronounced activity of the attention. How difficult it is for normal persons to follow a lecture word for word with unvarying attention. The attention as we know undergoes periodic variations, which in persons hard of hearing, for another reason, lead to early fatigue. I refer to the fact that they are lacking in any extensive background of word images with which the new impressions can be associated. Persons with normal hearing are so practiced in association that it is not necessary to hear clearly every word and every sound of that word. Consequently we can allow our attention periods of rest, which it is not possible for a person hard of hearing to take.

So much concerning the worth of hearing exercises. In the beginning of my article, under the results to be obtained from these exercises I mentioned, clearness of articulation, intonation and variation of tone. But in addition it will also be granted that the external use of the existing remnant of hearing is sometimes of great service, and assists greatly the modulation of speech and the tone color of the vowels, so that both accent and rhythm are in this way exercised. An improvement of this kind is dependent, however, on a grade of hearing such that the pupil concerned hears his own voice. This is necessary for a comparison with the voice speaking in his ear. In the group of those with very little hearing, who notwithstanding all exercise are unable to differentiate the vowels, on account of their incapacity for this self-control through comparison, improvement of the articulation by hearing exercises is not possible. Glaring faults in the enunciation of the consonants can seldom be corrected through the ear, even if a reasonable amount of hearing is present. We meet daily with a similar phenomenon in normally hearing persons. How many of us articulate falsely single sounds such as "r" or "s," and are unable to perceive the difference between our own false reproduction and the correct articulation of another. How

much more difficult therefore must it be for one with imperfect hearing sensations to perceive the various shades of the consonant sounds, and, using his limited hearing as a basis, to articulate the same correctly.

From the aforesaid, and from the earlier stated proposition, that without thorough previous instruction in articulation, speech cannot be learned from a successful auricular course, it follows that, as heretofore, the instruction in articulation will play a most important part in the education of the deaf.

As to what children in the Institute for the Deaf shall be taught speech through the ear, one must reply that from a humanitarian standpoint, each child who shows the least particle of hearing should have the benefit of trials and exercises, the aim being to develop to its greatest extent what hearing they have, and to put it at the service of appropriating speech. Unfortunately, on account of the limited time allotted for the education of their pupils, and the danger of overburdening and straining the teaching force in giving these exercises, as well as on account of financial considerations, the schools for the deaf can allow themselves to be guided only by motives of expediency. If from the beginning, or soon after the beginning of the auricular training, it is evident that no practical use can be made of results gained through the expenditure of much time and the endless labor involved in such instruction, it should be discontinued. From the standpoint of the physician, or of the scholar, it may be very interesting to observe that by extensive training, and by using the auxiliaries of the hearing, sense of touch and combination through association, it is possible to bring those children who show only a trace of hearing so far that they are able to perceive a small number of known words and phrases. But for practical use in life, for which we are working especially, such results are almost worthless. If such a child be not continually exercised, the results obtained through so much labor will be quickly lost and the whole work will be in vain.

This consideration of practicability limits the hearing exercises to those pupils of the schools for the deaf who at least show a good vowel hearing. Normal hearing children often found in schools for the deaf, whose speech disturbance does not

spring from a defect in the hearing apparatus, naturally must also be admitted to this class in order to acquire the function of speech. As many sound sensations as possible, especially through speech, should be given those children deemed suitable for auricular training, in order that, according to the physical law that every stimulus increases the sensibility for perceiving, the function of speech will be made more active. The greater the number of impressions made by the acoustic image of a word, the stronger the disposition which remains for future impressions, for each function is increased through use, just as *vice versa* it is decreased and finally becomes inoperative through disuse.

Whether, as is claimed by many, an actual increase of hearing in the physical sense, resulting from extensive exercise, takes place, or whether the fact of an increased power to perceive speech can be explained through the psycho-physical process of the exercise of the function of speech, is perhaps at present still doubtful; but it is not doubtful that even a weakened ear, by strained attention and sufficient training, can accomplish enough to arouse our astonishment. It is fully in accordance with this, that children with considerable capacity for hearing are continually receiving stimuli in the usual class instruction, and this chance stimulation, little by little, with growing intelligence and increasing knowledge of language, to a certain extent trains the function of speech. Surely every institution can point to a number of pupils who on entering showed only a vowel hearing; whereas on leaving the institute they were able to receive a large part of their language through the ear, without auricular training having taken place. If now the unpremeditated hearing exercises which are given incidentally through the usual school instruction, show such results in the development of the speech function, does it not go without saying that through systematic training and conscious modulation and accent exercises, much better results can be attained much more quickly?

With the present organization of most schools, where the partially and totally deaf are instructed together, practical and systematic exercises during the usual school hours would

scarcely be possible or productive of much good. If those pupils with partial hearing, both in and out of instruction, are always with the totally deaf, one cannot avoid the feeling that no good influence over the speech of the former can be exercised by the monotonous, wholly unrythmical speech of the latter. Neither do these children hear normal speech from the teacher, for he, having the totally deaf child always in mind, speaks slowly, often giving undue length to each sound, in order to facilitate lip-reading. In this way those ever recurring variations, which make normal speech so living and effective, viz., pitch, accent and rhythm, are to a great extent lost. Through this same contact, development of speech as regards an increased vocabulary, and a knowledge of grammatical construction, is certainly retarded. It would be possible by dividing these children into separate classes, to adopt a modified and quicker method with the hard of hearing; a method more like that used with normal children. Further, the fact that the totally deaf use signs more or less constantly must not be forgotten, for this influence also would be harmful to the development of speech in those hard of hearing.

From the reasons given above it follows that separate instruction for those capable of learning speech through the ear would be greatly to their advantage. Naturally the ideal course would be to place them in entirely distinct institutions, where they could be instructed according to their special needs. Where this is impossible, it might be worth while, in those institutions in which there are a sufficient number of children with hearing, to make up classes of picked children for special instruction, as will be done in 1902-03 at Dobling.

Should this method of organization also prove impracticable the old way of instructing them in the same class room would be the only resource, and the disadvantages already mentioned would be unavoidable. The plan of giving a half hour's auricular training outside of the usual instruction has few advantages, I think, for each child receives but a few moments exercise during which little can be accomplished. He really receives more sound stimulus during the usual instruction periods, especially if the hearing is consciously used more than heretofore.

In judging objectively of the worth of the auricular training, one reaches the conclusion that it cannot be rejected *ad limine*, but must be subjected to further trials, in order that by means of sufficient collected data a trustworthy judgment may finally be given. Naught can be gained through superior disregard, or biting scorn, and just as little through untruthful reports of results gained, for nothing hurts a good cause so much as to arouse hopes which can never be realized.

In conclusion I am but voicing the thoughts of all true friends of the deaf when I express the hope that the ultimate judgment on speech instruction through the ear may result to the good of the poor child to whom Mother Nature has been but a step-mother.

CURRENT HISTORY IN THE SCHOOLROOM.

JAMES L. SMITH, FARIBAULT, MINN.

The real psychology of life is in its news.—*Jules Verne.*

At the meeting of the National Educational Association in Minneapolis last summer, Archbishop John Ireland gave an address on the subject, "Devotion to Truth; the Chief Virtue of the Teacher." In the course of his remarks he spoke as follows in regard to the mission and character of the newspaper:

"If I were to choose where outside of the class-room for the general welfare of humanity I should have devotion to truth prevail, I should name the newspaper. The newspaper is to-day pre-eminently the mentor of the people; it is read by all; it is believed nearly by all. Its influence is paramount; its responsibility is tremendous. Its province is to narrate facts—to give the truth, nothing but the truth, and all the truth—to allow both parties to a controversy to be heard—never to palliate or distort; never to omit, when that which is omitted may be of relevancy in the formation of public opinion; never to publish the doubtful as certain, the mere gossip as well-ascertained news; never, above all else, to put before readers error and falsehood. Facts given, the editor is at liberty to argue for them in favor of his own tenets, and even then let there be radiating through limpid lines the fair love of truth, rather than the wish to extol party or sect."

The daily newspaper is becoming more and more the epitome of the state and nation, and of the life and achievements of the people who constitute them. For this reason the study of Current History in all schools is of the highest practical importance. This fact is being recognized, with the result that Current History is receiving more and more attention. But it has not yet attained the position in the curriculum of most schools that its value to the rising generation deserves. Much more attention is devoted to the study of ancient history and much less to that of Current History, than their relative importance calls for. The past is of value only in its bearing upon the present. We are training the present generation of children for

the "living present" and the possible future. The great mass of facts and dates over which we spend so much time in the history of the past has little value in preparing our youth for the duties of the present. If the chief aim of modern education was to produce scholars and philosophers, then the extensive study of the world's past history might be justified. But the great mass of our boys and girls will never get beyond the average common school course, and therefore it is essential that that course should be made as practical and useful as possible. The chief aim of all educators should be to adapt the curriculum of the schools so as best to prepare young people for intelligent citizenship, and to accomplish this it is necessary to make them familiar with the political, social, and moral questions of the day. In no way can this be done so effectively as by a systematic study of Current History, of which the daily newspaper, intelligently used, is the best text book.

Important as the study of Current History is to all children, it is particularly so in the case of deaf children. Hearing children can learn much of it outside of school, from the conversation of their elders and from public addresses and discussions. These sources of information are practically closed to deaf children, and there remains to them only the newspaper. If we can so direct our instruction to deaf children at school as to form in them the habit of reading the newspaper intelligently, we shall have done much more of real value to them in after life than if we fill their minds with a mass of facts relating to the peoples and events of bygone ages.

If the importance of the study of Current History is admitted, the next question for consideration is, what method of study will produce the best results? The object of this paper is to present *one* method, which, so far as tested, has produced excellent results.

More than ten years ago the Minnesota School for the Deaf began to teach Current History in the class-rooms systematically. Enough copies of a certain monthly publication in Current History were subscribed for to supply the individual pupils in the advanced classes. The pupils were required to read, study, and stand examinations on these. The results were not

satisfactory enough, chiefly because the monthly publication did not keep up with the daily happenings of the world. Many events passed into history before the pupils arrived at them in the course of their study. Next the plan was tried of requiring the pupils to bring into the school-room daily, and to write on the blackboard, items that they gleaned from the newspapers in the reading-room. This was an improvement, but it still fell short of what was desired, for the pupils failed to make a good selection of news, bringing in much that was trivial and unimportant, and leaving out matters of real interest and value as news. Then two or three of the teachers tried the plan of gleaning the news themselves from the daily newspapers, and writing it on the blackboard every morning. The pupils copied it in note books and studied it as before. This was a much better method, but it had the disadvantage of taking up a great deal of time in the school room.

When Superintendent Tate assumed charge of the school in 1896, upon the retirement of Dr. Noyes, he introduced the system of teaching Current History by means of bulletin boards, which had been followed in the Missouri School. This system, briefly described, is as follows: In the study room of the boys and in that of the girls there is a large blackboard. On these blackboards the teachers, by turns, write every day the cream of the news as gleaned from the daily papers. The pupils of the advanced classes copy one or more of these items each, and the following morning write them on the blackboards in their respective school rooms. The teachers comment on them and explain where necessary. Some of the teachers require that the most important items be copied into note books for future review.

I will now describe in detail the method of handling the news in one of the classes, the highest class in the Manual Department:

Each pupil is required to bring at least one item of news daily, either from the bulletin boards or from newspapers. There are fifteen pupils in the class, and to give an idea of what they bring in, the following collection is presented, written one morning a few days ago:

The United States will send an armed fleet to Honduras very soon. Bonilla, who claims to have been elected to the presidency, has proclaimed himself President.

The blizzard which raged in the West, is now prevailing along the Atlantic coast.

Senator Hanna has introduced a bill at the request of the National Industrial Council to pension all ex-slaves who were freed by the proclamation of President Lincoln during the War of the Rebellion.

The ground floor of John Knox's house in High Street, Edinburgh, has been transformed into an old book store.

The United States quarantine officials have declared Manila to be free from cholera, thus ending the quarantine which has lasted nearly a year.

It is reported that there is very great danger of a revolt in Macedonia among the Christian and Ottoman population, on account of the Sultan's misgovernment.

Governor Van Sant has issued a proclamation calling upon the people of Minnesota to contribute towards the relief of the famine sufferers in Sweden, Norway, and Finland.

W. R. Estes, of Madelia, Minn., recently appointed United States consul at Antigua, British West Indies, was appointed on Governor Van Sant's staff with the rank of colonel.

Governor Hickey of Nebraska says that the public schools are injurious to character, because they do not teach Christianity.

The King of Italy expects to visit the King of England in the spring.

King Edward is still confined to his apartments at Windsor Castle, but his progress is perfectly satisfactory to his physicians.

B. B. Sheffield is building an elevator at Le Sueur Center, to supply grain for his mills in this city.

St. Paul—Chicago and Eastern roads have devised a plan for settling rate disputes.

Congress may appropriate some money to help build and improve the country roads, so the rural mail carriers can travel fast.

President Roosevelt was asked to be arbitrator in the Venezuela trouble, but he declined.

It is reported that President Loubet of France may visit the United States soon.

The above are one day's news from the bulletin boards. The average is about the same, sometimes better, sometimes

worse. It will be noted that there is a mixture of local, state, national, and world news in the collection.

The pupils write the news on the blackboards the first thing in the morning. Then, with all the class looking on, the teacher goes over each item. If errors of any kind are noted, the pupils are asked to point them out and correct them. The writer of each item is expected to be able to state just what it means. If a new word appears in an item, the writer is asked to define it, the understanding being that all new words must be looked up in the dictionary beforehand. If the name of any person appears, the pupils are asked who it is, why noted, etc. Places are located on the maps. Carelessness in writing, spelling, punctuation, etc., are strongly censured. When an item is not understood at first reading, the teacher uses every effort to induce the class to think out the meaning for themselves, giving hints where necessary. Often the teacher thinks it wise to enlarge on some particular item, throwing side lights on it. Special attention is given to bringing out the reasons for things. Ordinarily all this is done inside of thirty minutes.

When all the items have been read, corrected, and commented on in this manner, the teacher selects the new words, names and phrases, and writes them on the blackboard with simple definitions opposite. A few of recent occurrence are here produced by way of illustration:

asphyxiated—choked by poisonous air or gas.

rush orders—orders to be filled in a hurry.

hydrophobia—disease caused by the bite of a mad animal;
the word means "hate of water."

availed nothing—was of no use.

"Cream City"—Milwaukee.

Guild Hall—City Hall of London.

Doukhoboers—A peculiar Russian religious sect.

on the verge of—near; close to.

Perseus—a famous Greek hero.

Confucius—a famous Chinese philosopher who lived about
600 years ago and founded a religion.

Porte—a name given to the Turkish government.

bullion—uncoined gold and silver.

Protocol—a temporary agreement, usually between nations
at war.

. These definitions are copied by the pupils into note books, and are reviewed nearly every day, until the pupils become familiar with them. Many of them are of frequent recurrence in the daily news. As a rule, four or five definitions are added every day.

The main advantages of this method of studying Current History may be stated briefly as follows, in chance order:

1. Cultivation of the memory—The pupils are expected to write the items from memory every morning.
2. Accuracy in copying—Carelessness in this respect is strongly condemned.
3. Handwriting--Neatness and legibility are insisted upon.
4. Punctuation and Capitals—These minor points receive close attention.
5. Spelling—Inaccuracies in this respect are frowned upon.
6. Geography—All places must be located on maps.
7. History and Biography—Names of famous persons and their deeds are noted.
8. Use of the Dictionary—Pupils are required to look up unfamiliar words in the dictionary.
9. Reading understandingly—Pupils are expected to understand what their items mean as a whole.
10. Reasoning—Pupils are stimulated to think out the idioms, and they are urged to remember them and use them, which many of them do.
11. Use of idiomatic language—Special attention is called to the meaning of items that are not clear at first reading.

The objection to this plan will doubtless be raised that the selection and writing of the news every day by the teachers is too much of a help to the pupils; that it would be better for the latter to learn to read and select news themselves. In reply it can be said that all except the most advanced pupils cannot read the papers with sufficient understanding and judgment to select the best. If they read the papers at all, they will incline to the sensational features, and overlook those of real value. The teachers eliminate almost wholly the criminal news, at any rate so far as details go. It is hoped in this way to form in the pupils the habit of reading papers for valuable information rather

than for sensation. Again, if our pupils are to read the newspapers after leaving school, it is essential that they should become familiar with the idiomatic style in simplified form, and by this every-day reading and explanation in the school-rooms, the pupils become more and more familiar with newspaper language. And lastly, a considerable proportion of pupils in each class, girls especially, will not read the newspapers assiduously outside of the school room of their own volition. By bringing the best of the daily news into the school room, all the pupils are obliged to take part in the reading, and an interest is aroused in some who otherwise might never take to newspaper reading at all.

I have outlined this method of teaching Current History, not with the belief that it is the best ever, but with the hope that this article may call forth suggestions and criticisms by which I, and others too, may profit. I have employed different methods of teaching this subject, but of all that I have tried, the one here described has given the most satisfactory results, and seems to arouse the most interest and attention on the part of the pupils.

MY LIST OF HOMOPHENOUS WORDS.

Continued from the ASSOCIATION REVIEW of February, 1903.

EMMA SNOW, NEOSHO FALLS, KANSAS.

G.

gramme, crab, cram, cramp,
grab.
grand, grant.
grant, grand.
grape, crape.
grate, crane, crate, grade, grain,
great.
grave, crave.
graze, craze, grace.
grease, crease.
great, crane, crate, grade, grain.
grate.
greater, crater.
greaves, grieves.
grebe, cream, creep.
greed, creed, green, greet.
green, creed, greed, greet.
greet, creed, greed, green.
grew, crew, grit.
grid, grin, grit.
gride, cried, grind.
grieves, greaves.
grim, crib, crimp, grip.
grime, crime, gripe.
grin, grid, grit.
grind, creed, gride.
grip, crib, crimp, grim.
gripe, crime, grime.
gristle, grizzle.
grit, grid, grin.
grizzle, gristle.
groan, crone, grown,
grocer, grosser,

grog, crock.
groom, croup, group.
gross, crows, grows.
grosser, grocer.
ground, crowd, crowned, grout.
group, croup, groom.
grout, crowd, crowned, ground.
grow, crow.
grown, crone, groan.
grows, crows, gross.
grub, crumb, grum.
grudge, crunch, crush, crutch.
gruel, crewel, cruel.
grum, crumb, grub.
grumble, crumble, crumple.
guard, cairn, card, cart, yard.
yarn.
guess, yes.
guessed, guest.
guide, guyed, kind, kine, kite,
guilt, gild, gilt, killed, kilt.
gull, cull.
gum, come, cub, cup.
gun, cud, cut, gut.
gunner, cutter, gutter.
gut, cud, cut, gun.
gutter, cutter, gunner.
guyed, guide, kind, kine, kite.

H.

ha, ah.
hack, hag, hang, hank.
hacked, act, hanged.
hacks, axe, hags, hangs.

had, add, at, hand, hat.	hauled, halt.
hade, aid, ain't, ate, eight, hate.	have, half, halve.
hag, hack, hang, hank.	haw, awe.
haggle, angle, ankle.	hawk, awk.
hail, ail, ale, hale.	hay, a, aye.
hair, air, e'er, ere, hare, heir.	haze, ace.
hale, ail, ale, hail.	he, hey.
half, halve, have.	head, end, hen.
hall, all, awl, haul.	heady, eddy.
hallways, always.	heal, eel, heel.
halt, hauled.	hear, ear, here.
halter, altar, alter.	heard, earn, herd, hurt, urn.
halve, half, have.	hearse, hers.
ham, am, hap.	heart, art, hard, hart.
hammer, amber, hamper.	heat, eat, heed.
hamper, amber, hammer.	heave, eve.
hand, add, at, had, hat.	heaves, eaves.
handle, addle.	heaver, ever, heifer.
handsome, hansom.	hedge, edge, etch.
handy, auntie.	heed, eat, heat.
hang, hack, hag, hank.	heel, eel, heal.
hanged, act, hacked.	heifer, ever, heaver.
hanger, anger.	height, eyed, hide, hied, hind, I'd.
hangs, axe, hacks, hags.	heir, air, e'er, ere, hair, hare.
hank, hack, hag, hang.	hell, ell.
hansom, handsome.	helm, elm, help.
hap, am, ham.	help, elm, helm,
harbor, arbor.	hem, ebb, em, hemp.
hard, art, hart, heart.	hemp, ebb, em, hem.
hardened, ardent.	hen, end, head.
hare, air, e'er, ere, hair, heir.	hence, hens.
hark, arc, ark.	her, err.
harm, arm, harp.	herd, earn, heard, hurt, urn.
harp, arm, harm.	here, ear, hear.
harps, arms.	hers, hearse.
harrow, arrow.	hew, ewe, hue, yew, you.
harsh, arch.	hews, hues, ooze, whose.
hard, art, hart, heart.	hev, he.
has, as, ass.	bid, hint, hit, in, inn, it.
hash, ash.	hide, eyed, height, hied, hind, I'd
hasp, asp.	hie, aye, eye, high, I.
hat, add, at, had, hand.	hied, eyed, height, hide, hind, I'd
hatchet, ashen.	high, aye, eye, hie, I.
hate, aid, ain't, ate, eight, hate.	highland, island,
haul, all, awl, hall.	hill, ill.

him, hip, hymn, imp.
hind, eyed, height, hied, hind, I'd
hinge, hitch, inch, itch.
hint, hid, hit, in, inn, it.
hip, him, hymn, imp.
hire, ire, higher.
hired, ironed.
his, hiss, is.
hiss, his, is.
hissed, hist.
hist, hissed.
hit, hid, hint, in, inn, it.
hitch, hinge, inch, itch.
hits, its.
hive, I've.
ho, hoe, O, oh, owe.
hoar, oar, o'er, ore, whore.
hoarded, horde, oared.
hoarse, oars.
hoax, oaks.
hod, hot, odd.
hoe, ho, O, oh, owe.
hoses, hose, owes.
hold, holed, old.
hole, whole.
holed, hold, old.
home, hope, ope.
hone, oat, ode, owed, owned.
hoo, who.
hope, home, ope.
horde, hoard, oared.
hose, hoses, owes.
hosed, host.
hosier, osier.
host, hosed.
hot, hod, odd.
hotter, otter.
hound, out.
hour, our.
house, ounce.
housed, oust.
hovel, awful.
howl, owl.
howlet, owlet.
hub, hum, hump.

hue, ewe, hew, yew, you.
hues, hews, ooze, whose.
huff, off.
hug, hung, hunk.
hum, hub, hump.
hump, hub, hum.
hunch, hush.
hung, hug, hunk.
hunk, hug, hung.
hunt, hut.
hunter, udder, under, utter.
hurl, earl.
hurt, earn, heard, herd, urn.
hush, hunch.
husher, usher.
hut, hunt.
hymn, him, hip, imp.

I.

I, aye, eye, hie, high.
ice, eyes, hies.
I'd, height, hied, hide, hind.
idle, idol, idyl.
idol, idle, idyl.
idyl, idle, idol.
I'll, aisle, isle.
ill, hill.
imbrued, imbrute.
imbrute, imbrude.
immigrant, emigrant.
imminence, eminence.
immunity, impunity.
immure, impure.
imp, him, hip, hymn.
impark, embark.
impenned, impend.
impend, impenned.
impugned, impute.
impunity, immunity.
impure, immure.
impute, impugned.
in, hid, hint, hit, inn, it.
inch, hinge, hitch, itch.
incite, ensign, inside, insight.

indebted, indented, intended.
 indict, indite.
 indite, indict.
 inferred, invert.
 inn, hid, hint, hit, in, it.
 inrapt, inwrapped.
 inside, ensign, incite, insight.
 intended, indebted, indented.
 invade, inveighed.
 inveighed, invade.
 invert, inferred.
 inwrapped, inrapt.
 ire, hire, hirer.
 ironed, hired.
 is, his, hiss.
 island, highland.
 isle, aile, I'll.
 islet, eye-let.
 it, hid, hint, hit, in, inn.
 itch, hinge, hitch, inch.
 its, hits.
 I've, hive.

J.

jack, jag, shack, shag, shank.
 jackal, jangle, shackle.
 jacket, jagged, shagged.
 jade, chain, shade.
 jail, shale.
 jam, chap, champ, jamb, sham.
 jangle, jackal, shackle.
 jaw, chaw, pshaw.
 jay, shah.
 jeer, cheer, shear, sheer.
 jel, shell.
 jeopard, shepherd.
 jerk, shirk.
 jest, chest.
 jet, shed.
 jib, chip, ship.
 jig, chick, chink.
 jiggle, jingle, shingle.
 jill, chill.
 jilt, chilled.

jingle, jiggle, shingle.
 job, chop, shop.
 jog, chock, shock.
 joined, joint.
 joint, joined.
 joke, choke.
 jot, shod, shot.
 joys, choice.
 jug, junk, chuck, chunk, shuck.
 juggle, jungle, chuckle.
 juice, chews, choose, shoes.
 jump, chub, chum.
 June, chewed, chute, jute, shoot.
 jungle, juggle, chuckle.
 junk, jug, chuck, chunk, shuck.
 jut, shunned, shunt, shut.
 jute, chewed, chute, June, shoot.

K.

kaiser, geyser.
 keel, keen.
 keen, keel.
 kernel, colonel.
 key, quay.
 keys, geese.
 kick, gig, king, kink.
 kid, kin, kit.
 kill, gill, kiln.
 killed, gild, gilt, guilt, kilt.
 kiln, gill, kill.
 kilt, gild, gilt, guilt, killed.
 kin, kid, kit.
 kind, guide, guyed, kine, kite.
 kindle, kittle.
 kine, guide, guyed, kind, kite.
 king, gig, kick, kink.
 kink, gig, kick, king.
 kirtle, curdle, girdle.
 kit, kid, kin.
 kite, guide, guyed, kind, kine.
 kittle, kindle.
 kitty, giddy.
 knack, lack, lag, lank, nag.
 knave, nave.

knead, lead, lean, neat, need.
knee, lea, lee, nee.
kneel, deal.
knees, lease, niece.
knell, dell, tell.
knew, gnu, lieu, new.
knick-knack, tick-tack.
knife, dive, life, live.
knight, lied, light, lined, night.
knit, lid, lint, lit, nit.
knitter, litter.
knob, knop, lop, nop.
knock, loch, lock.
knoll, dole, toll.
knop, knob, lop, nop.
knot, lot, nod, not.
knout, loud, lout, noun.
know, lo, low, no.
known, load, loan, lode, lone,
note.
knows, nose.

L.

labour, neighbor,
lace, lays.
lack, knack, lag, lank, nag.
lacker, laquer.
lacks, lax.
lad, gnat, land.
lade, laid, lain, lane, late.
ladder, latter.
lag, knack, lack, lank, nag.
laid, lade, lain, lane, late.
lain, lade, laid, lane, late.
lair, layer, neer.
lamb, lamp, lap, nap.
lame, name.
lambkin, napkin.
lamp-wick, lap-wing.
land, gnat, lad.
lank, knack, lack, lag, nag.
lap, lamb, lamp, nap.
lap-wing, lamp-wick.
laps, lapse.

lapse, laps.
laquer, lacker.
larch, large.
large, larch.
lash, dash, gnash, latch.
latch, dash, gnash, lash.
late, lade, laid, lain, lane.
latter, ladder.
laud, lawn.
law, gnaw.
lawn, laud.
lax, lacks.
lay, nay, neigh.
lays, lace.
lea, lee, knee, nee.
lead, knead, lean, neat, need.
lead, led, lend, lent, let, net.
leaf, leave, lief.
leak, league, leek.
lean, knead, lead, neat, need.
leap, neap.
learn, dirt, turn.
lease, knees, niece.
leased, least.
least, leased.
leather, nether, tether.
leave, leaf, lief.
led, lead, lend, lent, let, net.
lee, knee, lea, nee.
leech, leach, liege, teach.
lend, lead, led, lent, let, net.
lender, letter.
lent, lead, led, lend, let, net.
lessen, lesson.
lesson, lessen.
let, lead, led, lend, lent, net.
letter, lender,
lewd, loot, lute, newt, noon
nude.
levee, levy.
levy, levee.
liar, lyre.
lice, lies.
lick, ling, link, nick.
lid, knit, lint, lit, nit.

lie, lye, nigh.
 lied, knight, light, lined, night.
 lief, leaf, leave.
 liege, leach, leech, teach.
 lieu, gnu, knew, new.
 life, dive, knife, live.
 lift, lived.
 light, knight, lied, lined, night.
 limb, limp, lip, nip.
 limber, nipper.
 limp, limb, lip, nip.
 limped, limpid.
 limpid, limped.
 lined, knight, lied, light, night.
 ling, lick, link, nick.
 linger, liquor, nigger.
 link, lick, ling, nick.
 links, lynks.
 lint, knit, lid, lit, nit.
 lip, limb, limp, nip.
 liquor, linger, nigger.
 lit, knit, lid, lint, nit.
 litter, knitter.
 live, knife, dive, live.
 lived, lift.
 lo, know, low, no.
 load, known, loan, lode, lone,
 note.
 loam, gnome, lobe, lope.
 loan, known, load, lode, lone
 note.
 lobe, gnome, loam, lope.
 loch, knock, lock.
 lode, known, load, loan, lone,
 note.
 lodge, dodge, nautch, notch.
 log, long, nog.
 lone, known, load, loan, lode,
 note.
 look, nook, took.
 loom, loop.
 loop, loom.
 loose, lose, news, noose.
 loot, lewd, lute, newt, noon,
 nude.

lob, knob, knop, nob.
 lord, lorn.
 lorn, lord,
 lose, loose, news, noose.
 lot, knot, nod, not.
 loud, knout, lout, noun.
 lout, loud, knout, noun.
 love, luff
 low, know, lo, no.
 lub, lump, numb.
 lubber, lumber, number.
 luck, lug, lung.
 luff, love.
 lug, luck, lung.
 lull, dull, null.
 lumber, lubber, number.
 lump, lub, numb.
 lunch, lunge, nudge.
 lung, luck, lug.
 lunge, lunch, nudge.
 lurk, dirk.
 lute, lewd, loot, newt, noon,
 nude.
 lye, lie, nigh.
 lynx, links.
 lyre, liar.

M.

ma, bah, pa.
 mace, baize, base, bāss, bays,
 maize, maze, pace, pays.
 mad, bad, bade, bat, mat, pad,
 pat.
 made, bait, bate, bayed, maid,
 mate, paid, pate.
 maid, bait, bate, bayed, made,
 mate, paid, pate.
 mail, bail, bale, male, pail, paie.
 maim, babe.
 main, bane, mane, pain, pane.
 maize, baize, base, bāss, bays,
 mace, maze, pace, pays.
 make, bake.
 mall, ball, bawl, maul, pall.

mallet, ballot, palate, palette,
 pallet, pallid.
 malt, bald, bawled.
 mama, papa.
 man, ban, band, pan.
 manage, bandage.
 mane, bane, main, pain, pane.
 mangle, bangle.
 manner, banner, banter, batter.
 matter.
 mannish, banish.
 mantel, mantle.
 mantle, mantel.
 manure, mature.
 many, penny.
 map, pap.
 mar, bar, par, parr.
 march, barge, marge, marsh,
 parch.
 mare, bare, bear, pair, pare,
 pear.
 marge, barge, march, marsh,
 parch.
 mark, bark, barque, park.
 market, bargain, parquet.
 marry, parry.
 mars, bars, parse.
 marsh, barge, march, marge,
 parch.
 marshal, martial, partial.
 marten, martin, pardon.
 martial, marshal, partial.
 martin, marten, pardon.
 martyr, barter.
 mascot, basket.
 mash, badge, batch, match,
 patch,
 mask, bask, basque, masque.
 mass, bass, pass.
 massive, passive.
 mast, passed, past.
 master, pastor.
 mat, bad, bade, bat, mad, pad,
 pat.
 match, badge, batch, patch.

mate, bait, bate, made. maid,
 paid, pate.
 maternity, paternity.
 matrimony, patrimony.
 matron, patron.
 matter, banner, banter, batter.
 manner.
 matting, batting.
 mattock, paddock.
 mature, manure.
 maul, ball, bawl, mail, pall.
 may, bay, bey, pay.
 maw, paw.
 maze, baize, base, bāss, bays,
 mace, maize, pace, pays.
 me, be, bee, pea.
 mead, bead, beat, beet, meat,
 meed, meet, mete, peat.
 meal, peal, peel.
 mean, bean, mien.
 means, beans.
 meant, bend, bent, mend,
 penned, pent,
 meat, bead, beat, beet, mead,
 meed, meet, mete, peat.
 medal, meddle, metal, mettle,
 pedal, peddle, petal.
 meddle, medal, mettle, metal,
 pedal, peddle, petal.
 meed, bead, beat, beet, mead,
 meet, mete, peat.
 meeting, beading, beating.
 mell, bell, belle, pell.
 mellow, bellow.
 melt, belt, pelt.
 member, pepper.
 men, pen.
 mend, bend, bent, meant,
 penned, bent.
 mention, pension.
 mere, beer, bier, peer, pier.
 merge, birch, perch, purge.
 merit, buried.
 merry, berry, bury.
 met, bed, bet, pet.

metal, medal, meddle, mettle,
 pedal, peddle, pedal.
 mete, bead, beat, beet, mead,
 meat, meet, meed, peat.
 mettle, medal, mettle, metal,
 pedal, peddle, petal.
 mew, pew, pooh.
 mawl, mule, pool.
 mews, muse, pews.
 mice, buys, pies.
 mid, bid, bit, mit, pit.
 middle, piddle.
 midge, bitch, pinch, pitch.
 midst, bids, bits.
 mien, bean, mean.
 might, bide, bite, might, pied.
 mild, piled.
 mile, bile, pile.
 miles, piles.
 milk, bilk.
 mill, bill, pill.
 millet, billet, pillet.
 million, billion, pillion.
 mince, pins.
 mind, bind, pint.
 mine, bine, pine.
 miner, minor.
 minion, pinion.
 mink, big, pick, pig, pink.
 minor, miner.
 mint, pinned.
 minx, mix, picks, pix.
 mire, pyre.
 mirth, berth, birth.
 mislaid, mislate.
 mislate, mislaid.
 missal, missile, mistle, pistil,
 pistol.
 missed, mist.
 missile, missal, mistle, pistil,
 pistol.
 mist, missed.
 mistle, missal, missile, pistil,
 pistol.
 mite, bide, bite, might, pied.

mitt, bid, bit pit.
 mitten, bidden, bitten.
 mix, minx, picks, pix.
 moan, bone, mown, pone.
 moat, boat, bode, mode, mote,
 mowed.
 mob, bob, mop, pop.
 mock, bog, pock.
 mode, boat, bode, moat, mote,
 mowed.
 model, bottle, mottle.
 moil, boil.
 molar, polar.
 mold, bold, bolt, bowled, polled.
 mole, bole, boll, bowl, pole, poll.
 money, muddy, putty.
 monk, buck, bug, bung, bunk,
 muck, mug, pug, punk.
 mood, boon, moon.
 moody, beauty, booty.
 moon, boon, mood.
 moor, boor, poor.
 moot, boot, mute.
 mop, bob, mob, pop.
 mope, pope.
 moppy, poppy.
 more, boar, bore, pore, pour.
 morn, born, borne.
 morrow, borrow.
 moss, boss.
 most, boast, post.
 mote, boat, bode, moat, mote,
 mowed.
 mottle, bottle, model
 mound, bound, bout, bowed,
 mount, pound, pout.
 mouse, boughs.
 mow, bough, bow.
 mōw, beau, bōw.
 mowed, boat, bode, moat, mode,
 mote.
 much, budge, mush.
 muck, buck, bug, bung, bunk,
 monk, mug, pug, punk.
 mud, bud, bun, but, butt, pun.

muddle, bundle, puddle.
muddy, money, putty.
mug, buck, bug, bung, bunk,
monk, muck, pug, punk.
muggy, buggy.
mule, mewl, pool.
mum, bomb, bump, mump,
pump, pup.
mumble, bubble, bumble.
mummy, puppy.
mump, bomb, bump, mum,
pump, pup.
mumps, pumps.
munch, bunch, punch.
munion, bunion.
muscle, bustle, mussel, muzzle,
puzzle.
muse, mew, pews.
mush, budge, much.
music, musing.
musing, music.
muss, buss, buzz, pus.
mussel, bustle, muscle, muzzle,
puzzle.
must, bust.
mustard, bustard, mustered.
mustered, bustard, mustard.
mute, boot, moot.
mutter, butter.
mutton, button.
muzzle, bustle, muscle, mussel,
puzzle.
my, buy, by, pi, pie.
myth, pith.

N.

nag, knack, lack, lag, lank.
nail, dale, tail, tale.
nake, lake, take.
name, lame, nape.
nap, lamb, lamp, lap.
nape, lame, name.
napkin, lambkin.
naught, gnawed.

nautch, dodge, lodge, notch.
nay, lay, neigh.
neap, leap.
near, leer.
neat, knead, lead, lean, need.
neck, deck, leg.
nee, knee, lea, lee.
need, knead, lead, lean, neat.
ne'er, liar, layer.
neigh, lay, nay.
neighbor, labour.
nerve, turf.
nest, lest, test.
net, lead, led, lend, lent, let.
nether, leather, tether.
new, gnu, knew, lieu.
newel, duel.
news, loose, lose, noose.
newt, lewd, loot, lute, noon,
nude.
next, text.
nibble, nimble, nipple.
nice, lice, lies.
niche, lynch.
nick, lick, ling, link.
nickle, tickle, tingle, tinkle.
niece, knees, lease.
nigh, lie, lye.
niggar, linger, liquor.
night, knight, lied, light, lined.
nimble, nibble, nipple.
nine, line.
ninth, lithe, tithe.
nip, limb, limp, lip.
nipper, limber.
nipple, nibble, nimble.
nob, knob, knop, lop.
nod, knot, lot, not.
noise, toys.
nog, log, long.
nominate, dominate.
none, nun, nut.
noodle, doodle.
noon, lewd, loot, lute, newt,
nude.

noose, loose, lose, news.
 nose, knows.
 not, knot, lot, nod.
 notch, dodge, lodge, nautch.
 note, known, load, loan, lode,
 lone.
 noun, knout, loud, lout.
 nude, lewd, loot, lute, newt,
 noon.
 nudge, lunch, lunge.
 null, dull, lull.
 numb, lub, lump.
 number, lubber, lumber.
 nun, none, nut.
 nurse, terse.
 nut, none, nun.
 nuzzle, tussel.

O.

O, ho, hoe, oh, owe.
 oaks, hoax.
 oar, hoar, o'er, ore, whore.
 oared, hoard, horde.
 oars, hoarse.
 oat, hone, ode, owed, own.
 odd, hod, hot.
 ode, hone, oat, owed, owned.
 off, huff.
 oh, O, ho, hoe, owe.
 old, hold, holed.
 omen, open.
 once, ones, was.
 one, won, wont.
 ones, once, was.
 ooze, hews, hues, whose.
 ope, home, hope.
 open, omen,
 ore, hoar, oar, o'er, whore.
 osier, hosier.
 otter, hotter.
 ought, aught, awed.
 ounce, house.
 our, hour.
 oust, housed.

out, hound.
 out-bound, out-bowed.
 out-bowed, out-bound.
 out-cast, out-caste.
 out-caste, out-cast.
 out-side, out-sight.
 over-bowed, over-mount.
 over-do, over-due.
 over-due, over-do.
 over-dye, over-lie.
 over-lie, over-dye.
 over-mount, over-bowed.
 over-sea, over-see.
 over-see, over-sea.
 over-time, over-type.
 over-type, over-time.
 owe, ho, hoe, O, oh.
 owes, hoes, hose.
 owl, howl.
 owlet, howlet.
 own, hone, oat, ode, owed.

P.

pa, bah, ma.
 pace, baize, base, bāss, bays,
 mace, maize, maze, pays.
 pack, back, bag, bang, bank,
 pang.
 package, baggage.
 packed, pact.
 pact, packed.
 pad, bad, bade, bat, mad, mat,
 pat.
 paddle, battle.
 paddock, mattock.
 paid, bait, bate, bayed, made,
 maid, mate, pate.
 pail, bail, bale, mail, male, pale.
 pain, bane, main, mane, pane.
 pained, paint.
 pains, panes.
 paint, pained.
 pair, bare, bear, mare, pare,
 pear.

palace, balance.
palate, ballot, mallet, palette,
pallet, pallid.
pale, bail, bale, mail, male, pail.
palette, ballot, mallet, palate,
pallet, pallid.
pall, ball, bawl, mall, maul.
pallet, ballot, mallet, palate,
palette, pallid.
pallid, ballot, mallet, palate,
palette, pallet.
palm, balm.
pan, ban, band, man.
pane, bane, main, mane, pain.
panel, pannel.
panes, pains.
pang, back, bag, bang, bank,
pack.
panned, pant.
pannel, panel.
pant, panned.
pap, map.
papa, mama.
par, bar, mar, parr.
paradise, paralize.
paralize, paradise.
parch, barge, march, marge
marsh.
pard, bard, barn, part.
pardon, marten, martin.
pare, bare, bear, mare, pair,
pear.
park, bark, barque, mark.
parley, barley.
parquet, bargain, market.
parr, bar, mar, par.
parry, marry.
parse, bars, mars.
part, bard, barn, part.
partial, marshal, martial.
pass, bass, mass.
passed, mast, past.
passive, massive.
past, mast, passed.
paste, baste.

pastor, master.
pat, bad, bade, bat, mad, mat,
pad.
patch, badge, batch, match.
pate, baid, bate, made, maid,
mate, paid.
paternity, maternity.
path, bath.
patrimony, matrimony.
patron, matron.
patten, batten.
pattered, pattern.
pattern, pattered.
pause, paws.
paw, maw.
pawned, bond, bought, pond.
paws, pause.
pay, bay, bey, may.
pea, be, bee, me.
peace, bees, peas, piece.
peach, beach, beech.
peak, beak, meek, peek, pique.
peal, meal, peel.
pear, bare, bear, mare, pair,
pare.
pearl, purl.
peas, bees, peace, piece.
peat, bead, beat, beet, mead,
meat, meed, meet, mete.
peck, beck, beg, peg.
peddle, medal, meddle, metal,
mettle, peddle, petal.
peek, beak, meek, peak, pique.
peel, meal, peal.
peep, beam.
peer, beer, bier, mere, pier.
peers, pierce, piers.
peg, beck, beg, peck.
pell, bell, belle, mell.
pelt, belt, melt.
pen, men.
pence, pens.
pendant, pennant.
pennant, pendant.
penned, bend, bent, meant, pent.

penny, many.
 pens, pence.
 pension, mention.
 pent, bend, bent, meant, penned.
 pepper, member.
 perch, birch, merge, purge.
 pert, bird, burn.
 pest, best.
 pet, bed, bet, met.
 petal, medal, meddle, metal,
 mettle, pedal, peddle.
 petit, petty.
 petty, petit.
 phase, face, vase.
 phial, file, vial, vile, viol.
 phlox, flocks, flogs.
 phonograph, photograph.
 photograph, phonograph.
 phrase, frays.
 pi, buy, by, my, pie.
 pick, big, pig, mink, pink.
 pickle, mingle.
 picks, minx, mix, pix.
 piddle, middle,
 pie, buy, by, my, pi.
 piece, bees, peace, peas.
 pied, bide, bite, might, mite.
 pier, beer, bier, mere, peer.
 pierce, peers, piers.
 piers, peers, pierce.
 pies, buys, mice.
 pig, big, pick, mink, pink.
 pile, bile, mile.
 piled, mild.
 piles, miles.
 pill, bill, mill.
 pillet, billet, millet.
 pillion, billion, million.
 pillow, billow, minnow.
 pimp, bib, pip.
 pin, been, bin.
 pinch, bitch, midge, pitch.
 pine, bine, mine.
 pink, big, pick, mink, pig.
 pinned, mint.

pins, mince.
 pint, bind, mind.
 pip, bib, pimp.
 pique, beak, meek, peak, peek.
 pistil, missal, missile, mistle,
 pistol.
 pistol, missal, missile, mistle,
 pistil.
 pit, bid, bit, mid, mitt.
 pitch, bitch, midge, pinch.
 pith, myth.
 pitied, pitted.
 pitted, pitied.
 pix, minx, mix, picks.
 place, blaze, plays.
 plaid, bland, plait, plan, plant,
 plat.
 plain, blade, plane, plate, played.
 plait, bland, plaid, plan, plant,
 plat.
 plan, bland, plaid, plait, plant,
 plat.
 plane, blade, plain, plate, played.
 plank, black, blank, plaque.
 plant, bland, plaid, plait, plan,
 plat.
 plaque, plank, black, blank.
 plat, bland, plaid, plait, plan,
 plant.
 plate, blade, plain, plane, played.
 platter, bladder.
 played, blade, plain, plane, plate.
 plays, blaze, place.
 pleas, please.
 pleasant, blessed.
 plead, bleat, bleed, pleat.
 please, pleas.
 pleat, bleat, bleed, plead.
 pledge, blench.
 plied, blight, blind, plight.
 plight, blight, blind, plied.
 plod, blot, plot.
 plot, blot, plod.
 plows, blouse.
 poodle, boodle

pool, mewl, mule.
poop, boom.
poor, boor, moor.
pore, boar, bore, more, pour.
pop, bob, mob, mop.
pope, mope.
poppy, moppy.
port, porte.
porte, port.
porter, boarder, mourner.
post, boast, most.
pot, pod.
potion, motion.
pound, bound, bout, bowed,
mound, mount, pout.
pouter, powder.
pour, boar, bore, more, pore.
pout, bound, bout, bowed,
mound, mount, pound.
pouter, powder.
powder, pouter.
power, bower.
pow-wow, bow-wow.
pox, box.
praise, brace, brays, braze, prays.
prank, brag.
prate, braid, brain, brayed,
prayed.
pray, bray, prey.
prayed, braid, brain, brayed,
prate.
prays, brace, brays, braze, praise.
preach, breach.
president, president.
president, presedent.
previent, brevet.
prey, bray, pray.
price, pries, prize.
prick, brick, brig, bring, brink,
prig, prink.
pries, price, prize.
prig, brick, brig, bring, brink,
prick, prink.
prim, brim.
prime, bribe.

principal, principle.
principle, principal.
prink, brick, brig, bring, brink,
prick, prig.
prize, price, pries.
profit, prophet.
prog, prong.
prompt, propped.
prong, prog.
prounounce, pronouns.
pronouns, pronounce.
prophet, profit.
propped, prompt.
proud, browed, brown, prowl.
prowl, browed, brown, proud.
prude, brewed, brood, bruit,
brute, prune.
prune, brewed, brood, bruit,
brute, prude.
psalter, salter.
pshaw, chaw, jaw.
puddle, bundle, muddle.
puff, buff, muff.
pug, buck, bug, bung, bunk,
monk, muck, mug, punk.
pull, bull.
pullet, bullet.
pump, bomb, bump, mum,
mump, pup.
pumps, mumps.
pun, bud, bun, but, butt, mud.
punch, bunch, munch.
punk, buck, bug, bung, bunk,
monk, muck, mug, pug.
pup, bump, mum, mumm, mump,
pump.
puppy, mummy.
pure, mure.
purge, birch, merge, perch.
purl, perl.
purrs, burrs, purse.
purse, purrs, burrs.
puss, bus, buzz, muss.
putty, money, muddy.
puzzle, bustle, muscle.

METHODS IN ARITHMETIC, WITH AN ORIGINAL
METHOD OF ELUCIDATING THE MEANING
OF THE DECIMAL 3.1416 IN CIRCULAR
MEASURE.

BARTON SENSENIG, MT. AIRY, PHILADELPHIA, PA.

Plato said: "The study of Arithmetic is chiefly valuable for the wonderful effect it produces upon the thinking instrument." It certainly furnishes a wide field for mental activity. It lends itself readily to illustration, which is especially valuable to those whom nature has destined to absorb knowledge chiefly by way of the eyes.

Much of the value of arithmetical training, however, lies in properly presenting the subject. There is little mental training involved in teaching arithmetic by rule, as in that case pupils are satisfied in achieving results without properly understanding the subject. Rules are readily forgotten; and having taken the place of proper mental training in the first place, to what extent is a child benefited by his mathematical course if taught by that method? Rules should follow as a result of experience, but should not be taught by the teacher.

The rule for finding the area of a circle is to multiply the square of the radius by the decimal 3.1416. I was taught this rule when a boy, always referred to it when doing problems in circular measurement, and also forgot it from year to year, because it had no meaning except as a means of achieving a result. The same result will be produced in teaching the deaf in that manner; their minds are constituted like our own. They forget readily what they do not comprehend.

The deaf, however, prefer to do their arithmetic by rule and from memory. They have an aversion to the reasoning process; if they can come by the result in another way, they will do it. The mind activity involved in learning language and

speech in the early stages of their school life is largely that of memory, observation, and imitation. They learn to do things by doing them—rather a low form of mental activity, but a necessary one at that stage. Doing things right because you understand what you are doing, is an infinitely higher form of mental activity, which should replace the other as the child grows older.

The children need to learn arithmetic by doing problems; but, if they do not have a proper conception of the units they are using in their arithmetical work, they will soon be enveloped in an intellectual mist. I remember a girl who once found how many acres in a field of given dimensions. Upon being questioned as to the size of an acre, she marked out the dimensions with her hands; it was about 12 inches long and 6 inches wide. We go out on the campus and measure an acre for the benefit of each class, but we are also careful to add that *an acre may have any shape*. Repetition is not the cure for all vagueness. Pupils can easily learn to do things right without understanding them. We must turn to the unit again and again. We must picture or bring actual relations into view. To tell a child that he should have multiplied instead of divided, without further explanation, is a grievous pedagogical error; because it puts the child in the right way of doing a problem without his understanding better than he did before you told him what to do; and of all pupils whom it is hard to tie down to facts, the most hopeless case is the one who knows how to do something and yet does not understand what he is doing. He thinks he knows how, and all the teacher's explanations fall upon his mind like water on a duck's back.

Now, it is evident that much work must be done by way of illustration and objects if we wish to get pupils to the higher grade of mental activity—to do things right because they understand what they are doing; for the mind persists in following the old rut of learning to do by doing. The latter method is the only one to be followed with feeble-minded children; but, if a child has an average amount of intuitive knowledge, we do him harm by not appealing to his understanding at every opportunity.

After a child understands the four fundamental operations, he is in control of useful information, if he knows how to apply it. A child may be able to do the operations with facility and yet fail ignominiously in a simple test involving a little "common sense," because he fails to grasp the relations of things. Our chief work is in so picturing conditions that pupils apprehend the relations we wish them to perceive.

In attempting the solution of a problem, the child's mind works somewhat in this order—"Shall I add or subtract, multiply or divide?" Unless he understands the relations involved in the problem, he will be largely influenced in his action by the size of the numbers, by a word or two in the problem, by a faint recollection as to how a former problem bearing some resemblance to the one in question, was done; these and other considerations determine the action of the child and, of course, often lead to ridiculous results.

Reasoning consists in making comparisons. If we wish to get children to reason, we must get them to compare things. We compare things by subjecting them to a measure. Why is it that arithmeticians have chosen dollars, cents, yards, feet, inches, miles, acres, pounds, etc., to talk about? Why do they not talk about the latest fad, or some other subject more interesting? Because they want to develop the reasoning faculty through these units of measure.

After the pupils have become thoroughly familiar with a measure, it may be withdrawn. The presence of the unit of measure does not assist the reasoning process. Of course, if the power of thinking is low, instruction must linger longer in the concrete. We will do well, however, to remember that *we reason with ideas* and not with objects.

If ideas become less distinct as time passes we should develop them again in the same way as we did before, thus deepening the impression. Some children grasp an idea once for all; others forget, and must be frequently reminded. The teacher is not responsible for these traits of character. They may have been forming a hundred years ago. He works with such material as he has, and will be unable to produce like results. It is a common error when confronted by the poor work

of a pupil to infer that the pupil was not sufficiently well grounded in concrete work. In many cases the mind has not responded in a degree commensurate with the training given, and would not have succeeded well under any method. The world with all its objects has been before the human race for thousands of years without very much developing the reasoning faculty of some.

Mental training does not consist in looking at objects, but in making comparisons. The chief work of a teacher in arithmetic is to place the subject matter in such a light as to make it easy for dull children to draw conclusions. His work is to lead his pupils in the path of least resistance and thereby stimulate the reasoning faculty to activity.

To illustrate how a train of ideas may be set in motion, so as to end in useful knowledge and in the training of the understanding, let us lay bare the significance of the decimal 3.1416 as it applies in circular measure.

THE DECIMAL 3.1416 IN CIRCULAR MEASURE.

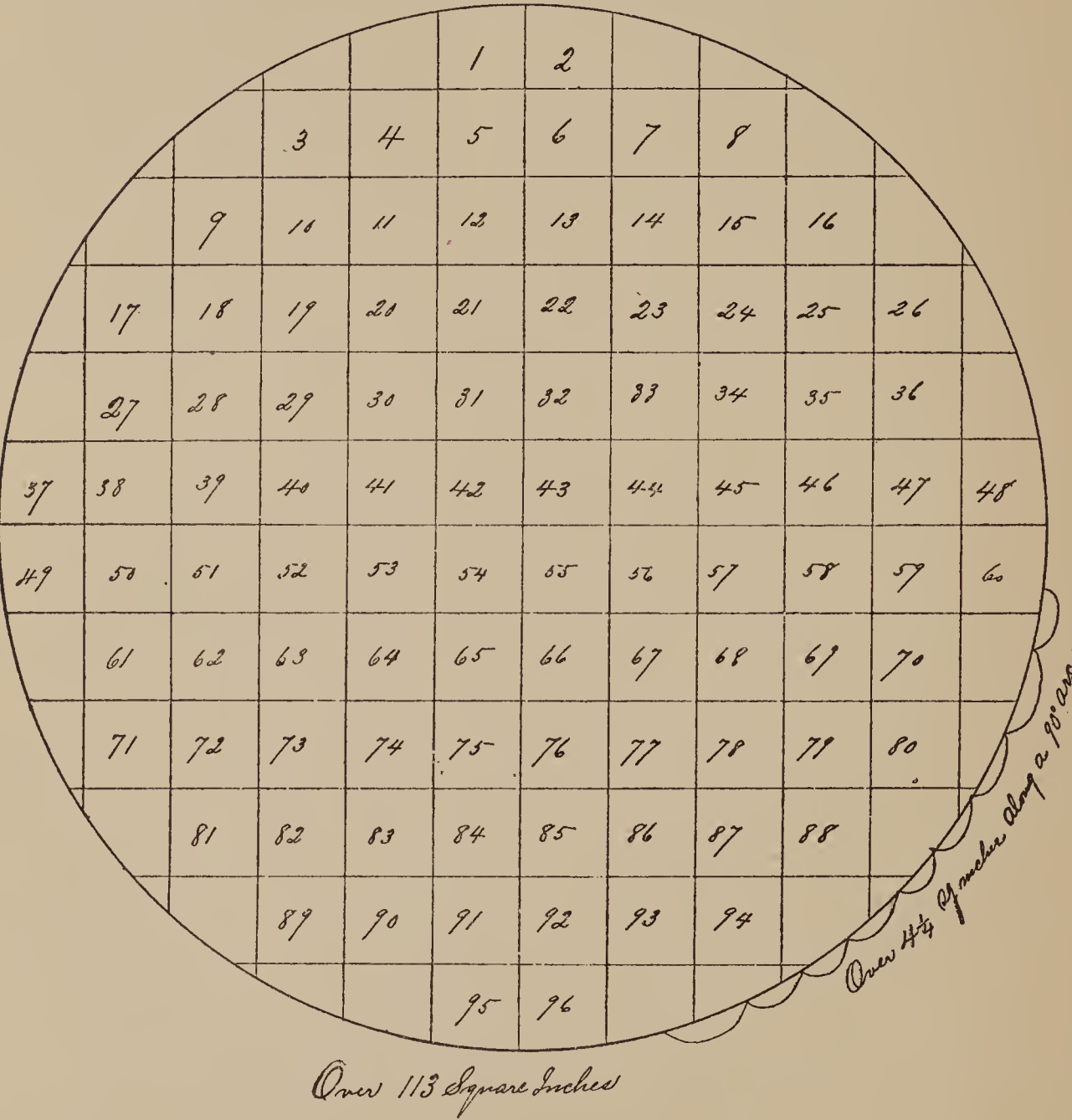
Before attempting the study of the circle, children should be familiar with the rectangular and triangular measurements. The areas of triangles and rectangles should be mapped out so that the children can readily perceive the operations necessary to find the number of units of measure.

In taking up the study of the circle, pupils should be taught that the curved line is the circumference, and that the plane enclosed by it is the circle. Many people think of the curved line as the circle. The diameter is a straight line passing through the center with both ends terminating in the circumference. The radius is the distance from the center to the circumference. After the pupils are familiar with these terms and can pronounce or spell them correctly, we ask which is longer, the diameter or the circumference. The pupils perceive that the circumference is longer than the diameter, and answer accordingly. The next step is to determine how many times as long as the diameter the circumference is. Measure accurately the diameter of a cylinder, and likewise measure accurately its circumference with a tape. It will be found, by dividing the length of the circumference by

the length of the diameter, that the former is about 3.1416 times the latter. It is then in order to give problems involving this fact. State no rule for finding the circumference; that would not further explain matters.

Having done with linear measure, we then proceed to find the area of the circle in square inches. By drawing a circle with

Fig. I.

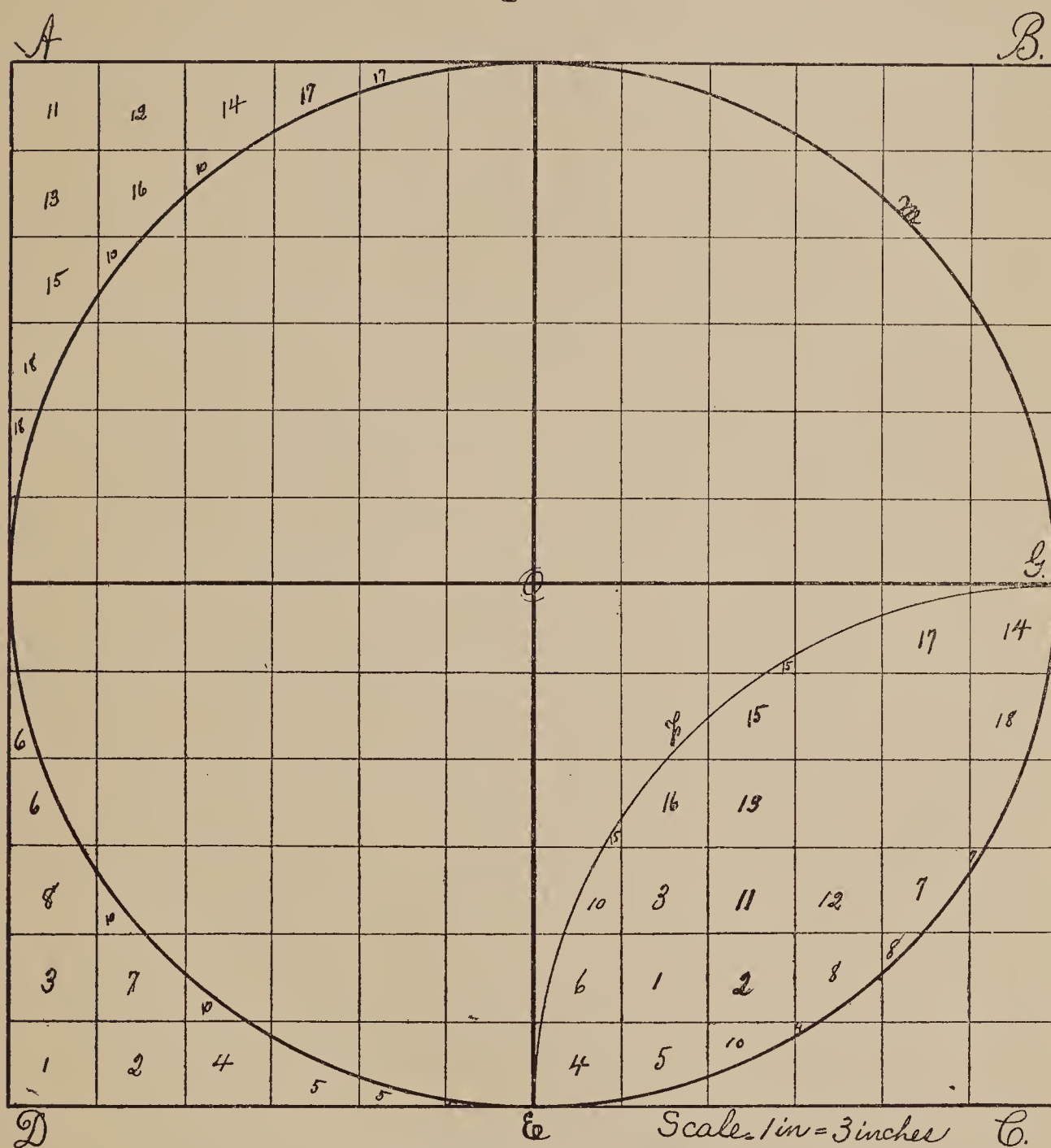


two perpendicular diameters, and chords, an inch apart, parallel to these diameters, we have the circle mapped out in square inches and parts of squares, as is seen in Figure I.

The pupil, in looking at Figure I, sees the difficulty in ascertaining the number of square inches, because of the parts of

squares adjacent to the circumference. We find that there are approximately 96 whole squares in the circle. By combining the parts along a 90 degree arc, we find that there are over 4 squares; or, along the entire circumference, the sum of the

Fig. II.



*3,416 Squares in a Circle.
Area of Each Square = $R \times R$.*

parts would be about 17 square inches. So the area of the circle would be approximately $96 + 17 = 113$ square inches.

The object in presenting this figure is to arouse interest and to show the difficulties presented by the problem. We would

not have sufficient time to map out every circle of which we wished to find the area; and, at best, we could not find the exact area by this method.

Now, my own experience has been that the pupils are deeply interested in finding out a way of coming by the result; and when you tell them that you will teach them a way, their minds are in a receptive state for the information. So the object for which you have striven in introducing Figure I has been realized.

In introducing Figure II, we show the children that it is a circle of the same size as the one in the first figure, inscribed in a square. The two perpendicular diameters and the sides of the square are drawn heavy, thus bringing into relief four squares having the length of a radius as the length of each side. The area of one of these squares is 36 square inches or $R \times R$.

We now ask the children if the four squares are entirely in the circle. They readily see that a part of each square lies without the circle. The next question is: "Do you think there are over three squares in the circle?" A majority think there are. You then explain to the pupils that if all the parts lying outside of the circle can be subtracted from one square and there is space left in that square, there must be an area of over three squares in the circle. We select the square O G C E from which to make the subtractions.

By placing one leg of the dividers on point C, with a radius equal to the radius of the circle, we inscribe the arc E F G, which is equal to the arc H M G. The space lying beyond the arc E F G in the lower square is exactly equal to the space lying without the circle in the square above it. Now, it remains to be seen if we can subtract the two other parts lying within the circle from the space between the two arcs in the square O G C E. We mark spaces between the two arcs with numbers, the same as we mark approximately equal spaces in the corners lying without the circle. Where two or more spaces without the circle bear the same number, their sum is considered equal to a space bearing the same number between the two arcs in the square from which we are making the subtractions. After carefully making all these subtractions, there will be about five and

three thirty-second ($5\frac{3}{2}$) squares left. There are 36 square inches in a square. One square inch $=\frac{1}{36}$ of a square; $5\frac{3}{2}$ squares $=\frac{163}{32} \times \frac{1}{36} = \frac{163}{1152}$ of a square, or .1415- of a square; or if measured more accurately in a larger circle, it will be about .1416 of a square; which added to the other 3 squares makes 3.1416 squares in a circle, each square having the length of R as the length of each side.

Now, I know that the reader will say this is hard for the average deaf pupil to understand; it would be, if he were obliged to dig out the meaning of the language in which the explanation is here set forth; but the deaf child sees the explanation in the figure. You simply point to the equal parts, and show him what is left in the one square after you have subtracted all the parts lying within the circle. This explanation is only given to children who have studied decimals. It has given me great satisfaction because it has given the pupils great pleasure. They understand it and are eager to do problems involving a knowledge of circular measure. We immediately introduce the cylinder, showing that the base of a cylinder is a circle, and that on each square inch of this circle may be placed as many cubic inches as the cylinder is inches high. If a cylinder is 16 inches high, there will be 16 cubic inches on each square inch. Pile up the cubic inches of wood, so that the children apprehend the reality of things. This kind of work I regard of transcendent importance in its effect on dull minds.

FORMATION AND DEVELOPMENT OF ELEMENTARY ENGLISH SOUNDS.

CAROLINE A. YALE, NORTHAMPTON, MASS.

V.

VOWELS—FRONT SCALE.

E LONG. [ɪ]

Chart Spellings : ee, -e, ¹ea, e-e. *See examples.*

Formation :—Voice moulded by passage through the closest possible vowel aperture over the front of the tongue.

Quantity : Long.

Examples : see, we, meat, these.

Professor Bell says that in the formation of this sound “the tongue rises convexly within the arch of the palate, and presses laterally against the palate and back teeth, leaving only a very narrow aperture for the voice, between the middle of the tongue and the palate.” Guttman describes the position for this sound as “mouth widest, tongue very much arched ; with its tip pressing against the lower inner surface of the lower incisors ; larynx carried farthest upward.”

Method of Development :—I. Imitation. Vibration may be felt in the larynx ; on the chin ; under the chin ; also on the top of the head. II. By contrast with *ah*. III. From *th* vocal. Draw the point of the tongue forcibly back from the position for *th*, its sides being held against the upper side teeth. The action in this case will be most distinctly felt under the chin. IV. From *s* or *z* in the same way as from *th*. V. By manipulation from *th* vocal or *z*.

I SHORT. [ɪ]

Chart Spelling : -i-

Formation :—Aperture over the front of the tongue slightly wider than for *e* long.

Quantity :—Short.

Ex.: pin.

Method of Development:—By contrast with \bar{e} , attention being directed chiefly to difference in quantity, but also to the difference in position. The relative length of sounds may be taught by attracting the pupils' attention to the period of vibration of each in the throat. These may be presented by lines on the wall slate or by directive gestures. In contrasting \bar{e} and \check{e} it is sometimes well to make the pupil aware of the expansion of the pharynx by placing the hand on the teacher's throat when \check{e} is given.

A LONG. [ɹ]

Chart Spellings: a—e ai, ay.

Formation:—The first or radical part of this sound results from a position of the front of the tongue a little lower than that for \check{e} . The second part of this sound, which is a glide or vanish, is the vowel \bar{e} .

Quantity :—This sound is diphthongal, the long radical part being placed first and the short glide last.

Ex.: cake, hail, say.

Method of Development:—I. By contrast with \bar{e} . II. The attempt to combine \check{a} and \bar{e} , will often produce the desired sound.

E SHORT. [ɪ]

Chart spelling : —e—, —y, ²ea.

Formation :—General position the same as that for the radical part of \bar{a} but with a slightly wider aperture.

Quantity :—Short.

Ex. red, candy, bread.

Method of Development:—I. By shortening the radical part of \bar{a} . II. By contrast with \check{a} . III. By running down the scale from \bar{e} until this position is reached :—f, ɸ, [ɹ, ɪ].

A SHORT. [ʌ]

Chart Spelling ; —a—

Formation :—General position the same as that for \check{e} , but with slightly wider aperture. This is the lowest position in the front vowel scale.

Professor Bell says that “the enlargement of the formative aperture is caused by the depression of the *middle of the tongue backwards.*”

Quantity:—Short.

Ex.: cat.

Method of Development:— I. By contrast with *ah*. II. By running down the scale from *ē* until this position is reached ;—f, f, [f, l, l. III. By widening the position for *ě*.

SOME DON'TS TO BE OBSERVED IN TEACHING SPEECH TO THE DEAF.

SARAH JORDAN MONRO, HORACE MANN SCHOOL, BOSTON, MASS.

In the February issue of THE ASSOCIATION REVIEW, several don't's were contributed. The following are sent for the present issue:

DON'T try to teach the position for any of the point of tongue consonants until the "second position" has been mastered.

DON'T allow the pupil to place his hand upon the chin of the teacher nor upon his own chin to feel the vibration of the voice.

DON'T blow nor puff out breath for final *p*.

DON'T call the attention of the pupil to the vibration of the voice in the lips while giving the sound of *m*.

DON'T allow the slightest pressure of the lips when giving the sound of *m*.

DON'T attract the attention of the pupil to the nose for the vibration of the voice in giving the sound of *m*, *n*, and *ng*.

EDITORIAL NOTE—The following extract from a private letter received from an experienced and successful teacher of the deaf emphatically re-enforces Mrs. Monro's admonition "Don't allow a pupil to feel the vibration of the voice in the throat," published in the February issue of the REVIEW:

"I am so glad Mrs. Sarah Jordan Monro said what she did in the last REVIEW about touching the larynx, for I have been convinced, ever since I studied vocal culture, that this practice resorted to by many articulation teachers, is the chief cause of constriction among the deaf. I think every articulation teacher should take a course under an expert vocal teacher. I have learned far more of the mechanism of speech from such instructors than I ever did from teachers of the deaf."

REVIEWS.

American Annals of the Deaf, Washington, D. C., March, 1903.

“An Inquiry into the Relative Value to the Deaf of Speech and Speech Reading” is the title of an interesting article by Mr. Paul Lange, of Delavan, Wisconsin. Of sixty-four deaf persons, all of whom can speak and read the lips to a greater or less extent, whose opinions on this question were asked by Mr. Lange, forty-three think speech the more valuable, eight give the preference to speech-reading, and thirteen consider the two accomplishments of equal value.

“A Clear Voice from Across the Sea” is a review by Miss Sarah Harvey Porter, of Washington, D. C., of Mr. F. Werner’s pamphlet “The German Method, and the Classification of Deaf-mutes according to Natural Ability, with a Plan of Division for the Province of Hanover.” Miss Porter is always an entertaining writer and what she has to say in this article will be read with interest and profit by people who may disagree most radically with her views on oral instruction. There are, unquestionably, points of weakness in the oral method as in every device of man for repairing the defects of nature, and its best friends are not those who ignore them and resent having them pointed out, but those who welcome criticism and seek to find therein all that may be of profit to their work and to their pupils. We regret there is not space to review the article at length: we should like to present to our readers some of the many suggestive things it contains, and also to point out to the writer that she is, in places, quite as illogical as she would make Mr. Werner out to be. For instance, referring to some statistical tables in the pamphlet under review, she makes the familiar quotation, “Falsehood may be classed, progressively according to its

iniquity, under three headings, lies, damned lies, and statistics," and straightway refers us for a refutation of the tables to some statistics in the Annals.

Other contents of this number are: "The Importance of Early Training for the Deaf-Blind," by E. M. Barrett, of Austin, Texas; "A Petition to the King," from the deaf of Great Britain, asking that the combined method be used in the schools of that country; "Recent German Publications," a review by John Heidsiek; "The Second Round Table of Wisconsin Teachers," by Paul Lange, of Delavan, Wis.; "Exhibits of American Schools for the Deaf and Blind at the Universal Exposition, 1904;" Poetry; School Notes and Miscellaneous.

Western Pennsylvania Institution for the Deaf and Dumb, at Edgewood Park, Pa.—Report for the years ending September 30, 1901, and September 30, 1902.

The building destroyed by fire in 1899 has been replaced by three buildings, an administration hall and separate residences for the girls and the boys, all connected by corridors. The school is now in good working order, but it has been necessary to incur a debt of \$100,000, which it is hoped the state legislature and the contributions of the charitable will soon enable the corporation to discharge. While imposing great burdens upon the directors and the principal of the institution, the fire has been to the advantage of the deaf children of the western part of Pennsylvania in that it has made possible the inauguration of numerous improvements in the housing and instruction of pupils. The following, from the report of Mr. Burt, the principal, is of special interest:

"As we are now able to carry out the long cherished plan of separating the little children from the larger and at the same time of establishing an oral department where the oral method shall be pursued both in school and out, a brief outline of our proposed plan may be acceptable. The Executive Committee authorized me to admit children, who are well developed physically and mentally, at six years of age. This is two years younger than we have admitted them heretofore. It is thought by many teachers that oral training may be profitably under-

taken at this age though doubtless the gain is at the sacrifice of home training and a mother's care which children of that age should have. To make this loss as little felt as possible special attendants will be provided to look after the little ones at play, at their meals and at night. The usual school exercises will be required, but they will be somewhat modified to suit the age of scholars, and will be supplemented by kindergarten work and games. They will occupy play grounds apart from the older pupils, and every encouragement will be given to make them use spoken language at all times. They will be in charge of teachers and supervisors who are wholly ignorant of conventional signs. This special training will cover a period of two years and at the end of that time may be continued longer if the results justify such continuance. It is sincerely hoped that the earlier admission will not curtail the latter end of the school course, but rather will lengthen it so that abundant opportunity may be given to all the boys to learn a trade and to the girls to learn cooking and general housework under a competent instructor."

The Teacher of the Deaf, Published under the auspices of a Committee of the National Association of Teachers of the Deaf, Great Britain. Vol. I, No. 1.

We congratulate the teachers of the Deaf of Great Britain upon at last having an official organ, and upon the character of the first number of the periodical. It is edited by Susanna E. Hull, of Bexley, Kent, and Arthur J. Story, of The Mount, Stoke-on-Trent, and its purposes are to record the work of the Association, serve as a medium for the discussion of educational subjects, elevate the standard of requirements in teachers, and disseminate a knowledge of the work among the general public. Mr. Richard Elliott, in "A Few Words of Welcome to our New Organ," points to the American Annals of the Deaf as an illustration of what it may hope to accomplish.

"Registration," one of the articles in the number, discusses a subject that is attracting much attention in the Kingdom. The government requirement necessitates no training in the education of the Deaf, but is the same as for primary teachers of normal children. It was decided at a late meeting of the Association that the three bodies that issue special certificates of

qualification to teachers of the Deaf—The Training College at Fitzroy Square, the Training College at Ealing, and the College of Teachers, London—should appoint a joint Board of Examiners to issue certificates, and the hope is expressed that such licenses to teach will be accepted by the Board of Education as equivalent to its own. The matter is now in the hands of the three training colleges referred to, and if they agree to the plan it will probably solve a very puzzling question and, incidentally, promote uniformity of methods and results.

“For the Defence” is a well written and well argued defence of the oral method by Mr. J. A. Weaver of Halifax, Nova Scotia. He claims that if the results in intellectual development of the pupil by this method are unsatisfactory it is due not to teaching by speech, but to incompetent teachers and to the ignoring of educational principals. If instructors will recognize and act upon the fact that speech is an educational means, and not the end, and will employ it to develop the reasoning powers and train the child to the intuitive acquisition of knowledge, the method will be found sufficient for imparting a good education.

The final statement of the Bessant Memorial Fund shows that £88 16s was collected, of which £15 was expended in the erection of a memorial tablet in the Manchester Schools and the balance was presented to Mrs. Bessant.

Other contents are “Home and Foreign Notes,” “The Arnold Library,” “Our Study Table” (book reviews), “School News,” “Notes from the School Room,” and reports of meetings of the National Association and its branches.

Perkins Institution and Massachusetts School for the Blind, Seventy-first annual report.

This report contains the usual large amount of interesting reading regarding the excellent institution in South Boston, and its pupils. The feature of most interest to teachers of the deaf is the account of the progress made by the deaf-blind children and the recital of the processes employed in their education. The rapid advancement of all these pupils and their ultimate

high attainments in knowledge, intelligence, and the power of expression should dispose of the idea that their successful instruction is dependent upon exceptional natural ability, and a study of the methods by which such results are obtained, should lead to improvements in the teaching of other children. Does the fact that our pupils are not blind as well as deaf constitute a sufficient excuse for the inferiority of their composition exercises when compared with those of Elizabeth Robin, Thomas Stringer, and others, specimens of whose work are given in this report? With the deaf-blind, conditions are such as to compel in the processes of their education mental development in the highest degree and of the highest quality. They must form clear and definite mental images, must reflect, compare, reason, deduce, with the intermediation of few material objects, so all the mental faculties are being constantly exercised. With the deaf, there is choice of an easier and apparently more effective method of teaching by objects, models, pictures, maps, and apparatus appealing to the eye, but making few demands upon the mind. Does not the difference in results suggest that there is too much of this objective teaching and that it would be well to compel our children to depend more upon insight and less upon visual images? Language is itself an abstraction and it is but natural that a mind trained to abstract thinking should rapidly acquire proper forms of expression.

Clarke School for the Deaf, at Northampton, Mass., Thirty-fifth annual report.

Mr. Franklin Carter, President of the corporation, in his report to the Board of Education, refers to the great difficulties in the way of teaching deaf children to speak, and of teaching them through speech, and emphasizes the importance of providing the school with every facility for attaining the best results. In this connection he speaks of the need for a school building which shall contain, in addition to class rooms, an assembly hall and a museum "with models of flowers and birds and the physical features of the different countries, and other natural objects,

and especially apparatus illustrating the progress of civilization." He reiterates the plea made in last year's report for a compulsory education law that will compel parents of deaf children to avail themselves of the provisions made by the schools of the state, or if the manual method is preferred, of some school teaching by that method, as, for instance, the Hartford school, of whose work he speaks in the highest terms.

Referring to the educational improvements made in the year, Miss Yale speaks of the advance made in the teaching of elementary science, or nature work, preparatory to instruction in geography. Regarding the young men, graduates of the school, who last June completed the course at Harvard University (See *THE REVIEW* of October, 1902), she says:

"That these young men won their degree by fair work and not by 'the sympathy of the instructors' must be evident when it is remembered that the entrance examination papers bear no names and are examined by professors having no knowledge of the individual students."

Illinois Institution for the Education of the Deaf and Dumb, at Jacksonville, Ill. Thirty-first biennial report.

This school had an enrollment during the year ending June 30, 1902, of 558 pupils. Superintendent Joseph C. Gordon specifies the following as additional buildings needed to complete the material equipment of the school: an isolation hospital; a school, studio and library building; and a cottage for teaching housekeeping.

Regarding the oral work, he says:

"We have not yet succeeded in giving to our pupils facility in spoken English to the degree which we believe is attainable. To accomplish better results our classes should be smaller, the instruction in many cases should be more thorough, the drill upon phonetic elements more frequent, and practice in speaking short sentences intelligibly, more persistent. We are glad to note an improvement in the quality of the speech from year to year, and are confident that the skill, zeal and enthusiasm of

our teachers will continue to produce better and better results as time goes on.

"However imperfect the speech of the deaf may be as a means of communication with the outside world, the discipline and the knowledge gained in acquiring this speech, and the kind, quality and degree of mental development thus acquired, have an incalculable value in fitting the deaf-mute to master alphabetic language and to feel, think and act as an educated human being. A deaf-mute may be educated without speech but in this day and age of the world such a one going forth from our schools is an anomaly, and he will always carry the marks of an imperfect education."

Alabama School for the Deaf at Talladega.—Biennial Report, 1902.

Like many others, this school is outgrowing its accommodations, and Mr. Johnson calls attention to the necessity for an appropriation for the erection of a new dormitory building. The legislature is also asked to amend the law regulating the term of attendance so as to permit the principal to extend it from ten to fourteen years when circumstances make it advisable. This recommendation, he says, is based upon the following grounds:

"As our school has increased in efficiency the gratifying result has followed that many of the pupils manifest a much more lively appreciation than ever of what the state is doing for them, and are more anxious to perfect themselves in their studies and in the various departments of handicraft. The facts are at present that in order to better enable us to mold the character and train the thoughts and habits of our pupils it is necessary to receive them at an early age. And in the development of speech, and in instruction in the art of lip-reading it is necessary to the best results that we receive our pupils when they are young. A child coming to us at seven years of age, is with us from five to seven years, until he is twelve or fourteen years old before we can begin his training in any of the departments of handicraft. He then has only three terms in which to acquire a knowledge of one or more of the branches in our industrial department."

Blatter fur Taubstummenbildung [Journal of deaf-mute Education] No. 23 and 24, Berlin, December 1 and 15, 1902, and 16th year, Nos. 1 and 2, Berlin, January 1 and 15, 1903.

"The Deaf-mute Institution at Paris a Hundred Years Ago," by W. Weise. In the year 1802 the well-known German philanthropist and author, J. H. Campe, undertook a journey to England and France, partly for study and partly for recreation. The interesting description of his journey has gone through many editions, and is even now read with pleasure. What interests us most is a visit Mr. Campe paid to the Paris institution for the deaf, whose director at the time was Mr. Sicard. In view of the recent development of deaf-mute instruction in France, it may be interesting to give a brief extract from Mr. Campe's book, showing how things were managed a hundred years ago. By special invitation from Sicard, Campe paid a visit to the institution on the 15th of August, 1802. We reproduce his own description:

"What principally distinguishes this institution from similar ones in Germany is: *first*, that Mr. Sicard imparts his instruction in a thoroughly scientific manner, and treats his pupils to so many transcendental subjects, that it looks as if it was his intention to produce nothing but philosophers; *second*, that, like his predecessor, the famous Abbé de l'Epée, he entirely renounces the idea of teaching the deaf to speak, and confines his efforts to enabling the deaf to make themselves understood by a language of signs or by correct and rapid writing; *third*, that he teaches his pupils a two fold language of signs, one of which I would call the *natural* and the other the *artificial*. The former consists in expressions of the face, gestures and movements which have some natural reference to the ideas to be represented; whilst the latter consists in writing in the air with the finger. At his request the visitors, of whom there were quite a number, put questions which might have puzzled any other person, e. g., how he managed to give his pupils some idea of the gender of words.

To solve this problem he began to express the idea of man by signs indicating strength, and of woman by signs of weakness. To show that he had understood, a deaf-mute immediately wrote

the words "man" and "woman" on the blackboard; and then in jocose manner showed by signs that his teacher could have indicated these ideas still better, and to show what he meant made such a sour, sullen and somber face (man) that some of the spectators got scared, and then such an indescribably sweet and smiling face (woman) that the ladies who were present broke out into loud applause. Thereupon Mr. Sicard by very simple and easily understood signs indicated that the next point was not the idea of 'man' and 'woman' but the general ideas underlying the same; and the deaf-mute wrote on the blackboard: *male* and *female*; and to show that he had thoroughly understood his teacher, wrote the word *gender*. Now, one of the visitors propounded the question why certain words had been made of the male and others of the female gender. Mr. Sicard assured us that such a question had never yet, within his knowledge, been asked, and that he himself was curious what answer the young and highly intelligent deaf-mute, by the name of Massieu, would make. He explained the question to him by signs. For a short while Massieu stood wrapped in meditation. All of a sudden his features brightened up, his eyes sparkled and with the assurance of a man who feels that he has made an important discovery he said, by signs, that the character of the sound had probably the deciding influence, rough and harsh sounding words being of the male and sweet sounding words of the female gender. This of course would not apply in many cases; but he, as a deaf-mute, could see no more natural reason. He mentioned incidentally that he had been told that there were languages which had three genders, male, female, and neuter; which idea appeared to amuse him so much that he broke out into loud and long laughter."

"First meeting of the East Prussia Association of Teachers of the Deaf" by G. Groh, held in October, 1902, in Königsberg. "Explanations and Instructions for the Parents and Guardians of Deaf Children, for Clergymen, Municipal Authorities, and others who Come in Contact with the Deaf," by J. A. Wilén, Leksand, Sweden; easily understood hints regarding the causes, character and varieties of deafness, the proper way of instructing the deaf, etc.: Mr. Wilén is of opinion that the term "deaf-mute"

is utterly improper, and should in all instances be replaced by the word "deaf" as actual muteness occurs only in the exceedingly rare cases of defects in the organs of speech, e, g., an enlargement of the tongue. Parents who from a misguided feeling of affection for their children, keep them at home instead of sending them to a school for the deaf, are guilty of a grave neglect. "Review of the Development of the Education of the Deaf in the Province of East Prussia during the last 25 years" by W. Mecklenburg. "Meeting of the Association of Saxon Teachers of the Deaf" held at Dresden in November. Owing to lack of space we refrain from giving details of the various meetings mentioned in these reviews. It may be stated, however, that, at all these meetings throughout Germany and Austria, great eagerness was evinced by all the participants to do their utmost in promoting the cause to which they had devoted their lives' best efforts, to learn from others, and in a spirit of harmony to pursue their high ideals. From the "Miscellaneous Communications" we gather the following: on the 1st of December, 1900 (the date of the last census) Prussia, with a total population of 34,472,509, had 31,278 deaf, of which number only 611 received no instruction. The Norwegian Agricultural School for the Deaf will be opened sooner than was originally expected. Liberal contributions were made by private individuals, the Government added a sum thereto, and a farm near Sandefjord has been bought, two-fifths of whose land is arable ground and three-fifths meadowland and forests. It is expected that the school will be opened in April, 1903. A short agricultural course has also been added to the institution in the public school for the Deaf at Christiania, and the last three months of the scholastic year are to be exclusively devoted to practical exercises; for the girls; cooking, washing, ironing, milking, etc., and for the boys: shoemaking, tailoring, carpentering, field and garden work.

Numbers 1 and 2, January, 1903.

"The Education of Teachers of the Deaf in the Kingdom of Saxony." An address delivered at the annual meeting of the association of Saxon teachers of the Deaf, Dresden, November 1st, 1902, by Dr. Schumann of Leipzig. Dr. Schumann de-

plores the fact that Saxony does not yet possess an institution for the education of teachers of the deaf, and expresses the hope that soon she will no longer be behind other nations, and more especially other states of Germany in this respect, such as Prussia, which has provided such a training since 1811, Bavaria since 1890, and Baden, since 1887. "The Life and Personal Book in the Institution for Deaf-mutes" by E. Lamprecht. Most of the German institutions for mentally weak children keep, at the request of the government authorities, so called "Life and Personal Books," which it would be well also to introduce in institutions for the deaf. This book gives, I, general data relative to: 1, the physical condition of the child, 2, its mental capacity; 3, its memory; 4, its speech—if any; 5, special characteristics, special proclivities. II. The results of the instruction in the different branches. III. Observations relative to the physical condition of the child whilst at school. A small 8 vo. book containing about ten leaves is all that would be needed for a personal record of a deaf person from infancy to youth. First: there would be general data (two leaves) giving name of the child, name, residence and social status of the parents; the cause of deafness; special occurrences and phenomena during the pregnancy of the mother; residence and food of the mother during this period; disturbing influences, sudden excitement or fright, etc., extraordinary and unnatural phenomena in the body of the child. Second; the baby age. Here it will be particularly difficult to make entries; most parents do not devote special attention to deaf babies, because in the first place they do not in the beginning notice that the faculty of hearing is lacking; and in the second place because in most cases they do not possess the time and intelligence to observe the mental and physical development of their child, and its disturbances, in its various stages. Nevertheless, this period in the life of a deaf child forms the most interesting period. Now is the time to ascertain how and when the lack of the sense of hearing becomes noticeable; how the other senses began to show themselves more lively and well defined; whether the deaf baby commenced later than other babies to show an interest in its surroundings, etc. 3. The so-called play age (2 to 6 years):

2 leaves; 4, the age of learning (6 to 14): 2: leaves. The entries relative to these two periods will not offer as many difficulties as those under 2, as the phenomena are much more intelligible even for parents who do not possess much of an education. The difference between deaf and hearing children now becomes more pronounced and more distinguishable from month to month and year to year. Here entries should state when and where the deaf child began to express its thoughts by gestures, when and how it began to manifest its feelings of gratitude, respect and affection; whether when shown representations relating to religion, some religious feeling showed itself, and in what manner.

5. the age of youth (2 leaves). Among the "Miscellaneous Communications" we notice a short but well written description of the church for the deaf in Oxford Street, London. As soon as the minister, Rev. T. W. Gilby, has taken his place in the pulpit, he presses a button, and an electric light, which cannot be seen by the congregation, strongly illumines his face, like a picture. This is necessary; for although he speaks his sermon, he above everything else makes himself understood to his hearers through the sign and finger language. "Report on the conference of Directors and teachers of institutions for the deaf in the Prussian Province of Saxony" held at Halle, November 14th and 15th, 1902. Among the subjects discussed we note the following: "The most suitable age at which deaf children should be admitted to institutions." In the Province of Prussian Saxony children are not admitted before the completed 7th year and not after the completed 12th year. "Is it advisable to apprentice deaf children who have left school in the town where the school is located." "Hill on the German and the French method," by M. Mohnhaupt. Hill, of course, is strongly in favor of the German method, and says among the rest: "Viewed from a purely theoretical point of view, the French method may have some advantages over the German method, but it is a matter of supreme indifference whether a method is only theoretically good or bad, since the true test of the method is its practical application, and since it is intended to produce results for practical life," and in another place he says: "The Germans have made it their object to prepare their deaf pupils as much as pos-

sible for practical life, and to render them capable of an active intercourse with their hearing fellowmen. And any one who has the real welfare of the deaf at heart, and who does not close his eyes to the advantages of the French system, will rejoice in this fact."

Among the book reviews we note a reference to two large and artistically finished pictures published by A. Pichler, Witwe und Sohn, Vienna, Austria, at the cheap price of 2 kronen (about 40 cents) each, intended as an ornament and means of instruction for the schoolroom. The pictures are executed in color, one representing a cabinet maker's shop, with the foreman planing off a board, the journeyman sawing, and the apprentice boring a hole in a piece of wood, and the other showing bricklayers at work on the wall of a house, and laborers bringing bricks, mortar, etc. These pictures are in every sense true works of art, and we are glad to learn that representations of other trades will soon follow.

Of the advertisements one might prove of interest to teachers of the deaf in this country as showing the average salaries of their German colleagues. Two teachers (either male or female) are needed at the institution for the deaf in Buren in the Prussian Province of Westphalia. The places are to be filled by Easter, 1903, and the following salaries are offered: a male teacher until definitely appointed, 1500 mark (\$357) after definite appointment, 1800 mark (\$428) and gradually rising to 3500 mark (\$833) per annum, with an annual sum for rent varying from 150 mark (\$35.70) to 300 mark (\$71.40) per annum; female teachers until definitely appointed, 1200 mark (\$285.60), after definite appointment, 1500 mark (\$357) gradually rising to 2500 mark (\$595) and 150 mark (\$35.70) for rent.

Nordisk Tidskrift for Dofstumskolan [Scandinavian Journal of Deaf-mute Instruction], Goteborg, Sweden, November 12, 1902.

F. Nordin: Report on the third annual meeting of the Association of Danish teachers of the deaf, held at Nyborg in April, 1902. J. Wallin: Report to the Swedish Ministry of

Public Instruction on his visit to various foreign institutions: The school at Nyborg, Denmark. This school possesses special interest on account of the methods which Director Forchhammer tests in giving instruction to his pupils. Among these we mention the imitative instruction, reading in unison, sound-writing, the hand-alphabet, and the phonoscope. Director Forchhammer starts from the idea that the best and most natural way of teaching speech to the deaf is the same which is followed in teaching it to hearing children, i. e., the imitative way. The hearing child hears a word, its meaning is repeated to him again and again, till the child finally repeats it and makes use of it in its proper connection. In the same manner the deaf should acquire speech, but while the hearing child acquires it through the ear, it is imparted to the deaf child either through sight, writing or lip-reading. The whole difference consists in this that the hearing child receives the impression, the images, through the ear and the deaf through the eye. For both the imitative method is the simplest and most natural. Great difficulties, however, are encountered in lip-reading as the speech is to a very great degree undistinguishable to the eye, because several sounds require the same position of the mouth, e, g., m, b, p; n, d, t; f, v, etc., whilst some cannot be seen at all, as k, g, ng, etc. For this reason, a start must be made with a visible written word; but as our writing has the great drawback that different sounds are indicated by the same sign, it becomes necessary to have a complete sound-writing as the basis for imitative instruction in speech, in order that the deaf child may acquire the correct ideas. This alphabet of written sounds comprises not less than 120 different letters, if we may so call them, but with certain groups of fundamental forms running through it all.

In order that full justice may be done to this method, it is necessary that the pupil should speak as much as possible. The word must be seen and spoken many times, before it is fully understood and its knowledge is firmly grounded. This is accomplished by reading in unison, which therefore, like the written sound, becomes one of the cornerstones of the imitative method.

Director Forchhammer adds another cornerstone to his method, which is intended to render easy and sure lip-reading

possible, so that reading in unison and answering in unison may go on uninterruptedly even after the teacher has spoken. This is accomplished by certain movements and positions of the right hand and its fingers to indicate different sounds, especially those which require the same position of the lips, and those which cannot be seen distinctly. [See "A New Expedient for Teaching the Deaf," in *THE ASSOCIATION REVIEW* of December, 1902.]

As regards teaching speech to the deaf, Director Forchhammer considers it immaterial whether the pupil receives the word by writing or from the lips of the teacher, as both are acquired by the sense of sight.

By the imitative instruction, based on reading in unison from written sounds or from the lips of the teacher, and aided by the hand-alphabet, the pupils are, as Director Forchhammer expresses it, fairly "submerged in speech."

The method of procedure is as follows: On the blackboard a short piece is written in sound-writing selected by the teacher with due regard to the knowledge of the pupils regarding the subject or idea of the piece. The pupils stand before the blackboard, and whilst the teacher beats time with his stick the pupils read in unison point after point, and finally the whole piece, everything being repeated a number of times. The teacher convinces himself that the pupils understand the various new words in the pieces, and gives explanations whenever needed.

After the piece has been read ten or fifteen times, the pupils write it in their copy books, each pupil by himself going up to the blackboard and reading it under the superintendence of the teacher who corrects any mistakes in the pronunciation. This finishes the piece for that day. On the next day they again read in unison several times, whereupon questions relative to the piece, as a general rule one to each idea or point, are written on the blackboard below the piece. After these questions and their answers have been read in unison several times, the pupils write them in their copybooks, and each pupil, whilst doing it, reads to the teachers as on the preceding day, and is corrected by him.

On the third day the piece, with the questions and answers, is read in unison several times, whereupon it is wiped off the blackboard.

On the fourth day the piece is dictated to the pupils who write it on their slates. Whilst the teacher examines and corrects what one pupil has written, the others read the piece aloud from their copy-books. As soon as a pupil is done writing, he must read aloud from his copybook the last piece that was on the blackboard.

On the fifth day the pupils ask each other the previously given questions which they are supposed to know by heart. Each pupil puts three questions, so that finally all get questions and all answer them three times.

As, therefore, a piece is treated on five successive days, and as each day a new piece is given, five pieces are treated every day. They must, consequently, be short in order to go through the above described course. A piece with its questions is read in unison fifty to sixty times in five days.

We give a specimen of these pieces:

“Thursday, June 13th.

“Yesterday we were at Holman. Mr. Hansen talked to a fisherman. The fisherman had many nets which he set in the water. He has a boat in which he sails. He catches plaice and cod.”

Questions: When were we at Holman?
With whom did Mr. Hansen talk?
What did the fisherman have?
What does he catch?

All the pieces are dated, and in general appearance resemble entries in a diary.

To aid the reading in unison very extensive text books have been prepared, written in large distinct characters and as a general rule beautifully illustrated. To indicate the accent to be given to each word, there are special signs before the word in red ink.

Similar unison-readers, true masterpieces in execution, exist for different subjects (language, Bible history, natural philosophy, geography, and even arithmetic) and are used till the third class is reached, when printed text books are employed.

The unison reader is placed on the blackboard, the pupils stand before it in a semi-circle, and read in unison under the direction of the teacher.

The explanation of words and sentences in the higher classes is often given in this way, that after the pupils have read in unison a piece from a printed book, they must read the piece by themselves and go to the teacher to ask an explanation of anything they don't understand.

Director Forchhammer gives decided preference to amusing and humorous pieces, fables, and other easily understood pieces, as the pupils are much more interested in such and remember them better.

F. N. (Fredrich Nordin) "Thomas Gallaudet," biography with portrait taken from the ASSOCIATION REVIEW.—Communications from different countries.

Die Kinderfehler [The Defects of Children], 7th year, 5th and 6th part, Langensalza, 1902.

Any literature might well be proud of possessing a periodical of this character, containing as it does learned and exhaustive treatises by prominent German specialists on every phase of the subject, i. e., all the illnesses and defects of children, their causes, prevention and remedies. We are of course specially interested only in articles treating of the defects of the organs of speech and hearing. The present number contains two articles of this character, viz: "The Development of the Speech of Children and its Hindrances" by Dr. Hermann Gutzmann, Berlin. It is of course impossible within the narrow limits of a magazine article to do full justice to the subject, as Dr. Gutzmann himself states, much less can an adequate idea of the article be obtained from a brief review. We shall nevertheless endeavor to give its salient points.

Four periods of the development of speech may be distinguished. The first is the cry-period of the child. The cries of a child are nothing but reflex productions of the voice which moreover are not observable in all cases, as children frequently greet the light of the world by sneezing. Ancient philosophers have extensively treated this subject, and thought these cries were a protest of the child against the misery awaiting it in this world; some even went as far as to say that the cries of boys

contained principally the vowel "a" and that of the girls the vowel "e" and that in their own way they thus made complaint of the fall of Adam and Eve. As regards the later speech, the cry period has special significance in so far as the cry-breathing foreshadows the type of the later speech breathing.

The second period does not begin until the child has become quieter and begins to take some pleasure in its surroundings. It frequently lies awake without crying. In addition to the movements of the organs of speech, and thereby—of themselves and voluntarily—the first sounds are developed, which are at first uncertain and tentative and are produced by all the organs of articulation, although the lips and the tip-end of the tongue take the largest part. A mother's love has from time immemorial found a deep significance in this stammering and endeavored to find a mother's name—mama—in these first tentative beginnings of speech.

The third period is likewise a period of stammering, which, however, differs very much from the second or reflex period, as it is characterized by the faculty of the child awakening with wonderful strength, and by the strange desire to imitate. The mental faculties of the child are more fully developed, the organs of its senses are put to a fuller use, seeing becomes observing, hearing—listening, touching becomes feeling for objects. This period is probably the most important in the entire speech-development of the child.

The fourth period is characterized by the circumstance that the child not only hears and understands spoken words and imitates them, but that it also makes use of them of its own accord.

Among the hindrances to the development of speech, should be mentioned those of the peripheric channels. Even if the child is hard of hearing or deaf, the cry-period is maintained in exactly the same way as with a hearing child, but during the second period a difference becomes noticeable. This period of stammering is therefore much more limited in deaf children, and is sometimes missed entirely. In lively and otherwise talented but deaf children, we sometimes find even the third period of the development of speech, that of spontaneous imita-

tion, simply based on the optic impressions of speech. Hill mentions instances where children who were absolutely deaf from birth learned to imitate simple sounds like papa, mama, ball, bow wow, etc., and even spoke them of their own accord.

The hindrances of the central processes are of course much more numerous and varied than those of the peripheric channels. Among these are the rather rare cases where the sensorial center of speech does not reach its development, in spite of good hearing. The most frequent are probably the purely psychical hindrances, often occurring in otherwise very bright children. The child evidently feels that its imitation of speech does not reach the perfection of its model. A feeling of disgust is created and the child gives up its attempts. Dr. Gutzmann declares that this is not merely a theoretical statement, but that in practice he has met with a number of such cases. Hindrances can be caused by the affections of some more distant part of the body, e. g., by a wrong diet, and still more by worms. Dr. Gutzmann mentions a case in his own practice where the presence of worms in the entrails of the child stopped the development of speech, which immediately continued its natural course after the child had been cured of the worms. In all the above mentioned cases the hindrances can be overcome with comparative ease, whilst this becomes much more difficult in hindrances of a psychical kind, but they too are overcome in the same manner as the muteness of deaf children by giving most careful and special attention to the optical and tactile channels. There are finally innate hindrances of the motorial center. Such children are slow in learning to run and slow in learning to speak. In such cases the difficulty in imitating is preserved for an unusually long time. Here likewise the only remedy is the constant speaking to the children, making the greatest possible use of the optical and tactile channels. Lastly there should be mentioned the hindrances caused by sickness or by defects of the organs of articulation. On the other hand the shortened band of the tongue or the growing fast of the tongue to the inside of the mouth, is very rarely a hindrance to the development of the speech. Dr. Gutzmann considers it a great abuse, when as is done in many of the rural districts of Germany, midwives

in a rough manner tear the band of the tongue of the baby with the nail of the thumb. Among the rural population this is considered just as important as vaccination. Dr. Gutzmann states that among the thousands of children with defective speech whom he has treated, he found only seven or eight where it became necessary to loosen the band of the tongue. The abuse referred to is probably caused by the idea prevailing since the days of Aristotle that tongue and speech are synonymous expressions; which is by no means the case, as is shown by the very instructive work by the English physician Twisleton, entitled "The Tongue not Essential to Speech."

In another article in this journal, Mr. E. Lamprecht, teacher in the Provincial Institution for the Deaf at Koslin (Pomerania), urges all teachers of the deaf to constantly, carefully and systematically observe the development, mental and physical, of their deaf pupils; and likewise to trace their history before entering the institution, the health and physical condition of the parents and the early surroundings of the children. By thus gradually obtaining a complete history of a deaf child, it will be possible for the teacher to direct his efforts in the right ways to strengthen what is weak, and to develop what still offers sound hope of ultimate success.

L'Educazione dei Sordomuti [The Education of Deaf-mutes]
Third Series. First year, Nos. 1 and 2, Siena, January and February, 1903.

We gladly welcome this old-established journal which after having ceased to be published for about a year, has again begun to appear; and, as we hope, is entering upon a new era of prosperity and usefulness under the able editorship of G. Ferreri. The following articles are contained in these two numbers: "The Vocabulary of Our Pupils," by G. Ferreri; "A New Study," by Dr. Bezold. The leading idea in Dr. Bezold's article is to gain reliable statistics of the deaf on the basis of careful and continued observations by professional aurists. "A New Means for Teaching Deaf-mutes," a review of the method followed by Mr. Forchhammer in the school at Nyborg, Denmark. "The Paris Congress of 1900."

Smaablade for Dovstumme [Leaflets for the Deaf], 12th year, No. 89, Copenhagen, Denmark, January, 1903.

“Report to the Ministry of Public Instruction by the pastor of the deaf-mute congregation in Copenhagen for the years 1901 and 1902. The work of this devoted minister, Rev. Mr. Jørgensen, was by no means an easy one. Although the congregation, owing to various adverse circumstances, does not possess a church of its own, it succeeded in renting a church, more conveniently located than the former one, where there was divine service every Sunday. There was quite a number of baptisms, weddings and funerals. Twice a month Mr. Jørgensen gave a Bible explanation in his own home, sometimes attended by as many as thirty deaf. He founded a temperance society, and spent a great deal of time in visiting the deaf in their homes, whilst his wife started a sewing society. An assistant, Rev. Mr. Heiberg, traveled through the Provinces during his summer vacation and preached and administered the communion in a number of cities where there was a considerable number of deaf. Thus we see that not only the physical and mental but also the spiritual welfare of the deaf in Denmark is in good hands. “A Trip Through Iceland” [continued] by Viggo Hansen. We learn, incidentally, from this well-written description of travel, that there are at the present time (1902) about 70 deaf in Iceland, which is quite a large number, in proportion to the population (70,000). Among the “Miscellaneous Communications” we note that on the 9th of November, 1902, a kindergarten school for deaf infants was opened in Copenhagen.

“**Effata**,” a Journal for Promoting the Welfare of the Deaf, 10th year, Nos. 3 and 4, Fredericia, Denmark, December, 1902, and January, 1903.

“What Shall I Do to Become More Proficient in Speech?” [continued] by A. K. Larsen. The answer is: First Read a good deal; second, write and copy a good deal. Put down every day a number of questions, questions which you have asked other people, and which other people ask you, and put down the answers.

CURRENT EDUCATIONAL LITERATURE.

The Daily Plan—Marguerite Stockman Dickson, in *Popular Educator*.

Several years ago there appeared in one of our prominent educational magazines the following question: "How many evenings last week did you spend in making over an old dress, when you should have been planning your work for the next day at school?"

Much might be said in answer to this question (from the point of view of the teacher who makes over old dresses, not as a wild dissipation, but as a means of covering her nakedness), but it is not my purpose to discuss it now. The part of the quotation to which I would call your attention is that which refers to "planning your work for the next day at school."

Many things have been said and written about the daily plan, until, perhaps, it would seem to you that there is nothing left to say. "Day books" flourish, and the conscientious teacher of the "plan brigade" looks with scorn or pity, according to her temperament, upon her erring sister whose day's work has not been reduced to a schedule hours before it is begun. And still no one seems to feel that "daily planning" may be overdone.

Before you lay down the paper in disgust, let me assure you that I do not believe in helter-skelter planless work any more than you do. Indeed, it is more planning, rather than less, that I am asking for. Again I must explain—by more planning I do not necessarily mean more hours spent in toiling beneath the flickering gas light. I mean more real planning and less writing about it. I mean fewer such entries as these in the day book:

Monday:

Reading—page 131.

Spelling—ten words taken from reading lesson.

Language—lesson on errors selected from Friday's compositions.

Arithmetic—ten examples—denominate numbers, etc.

This seems to me a culpable waste of time. Why write nearly a dozen words to remind you of those compositions weighing alike on your arm and on your weary spirit? You will remember them, never fear.

Again—I mean fewer of such reflections as these, while your pen hovers over the plan book:

“Another day on verbs won’t hurt them, I guess.”

“I’ll give them one more test on multiplication. Why they don’t multiply better is a mystery to me.”

“They haven’t half learned those capitals of the South American republics. Well, I won’t give them anything new till those are done.”

“I’m tired of multiplication of fractions, and I believe the children are, too. I’m going to start them on division. Perhaps they’ll do better on that.”

In my childish days, nothing so filled my soul with despair as to be told to “use my judgment,” at critical moments. I was so painfully aware that I had no judgment. When such remarks as the foregoing come to my knowledge—and I think you will all admit that they have a familiar sound—I wonder whether many teachers do not share my childish lack.

Perhaps “another day on verbs *won’t* hurt them,” except in the negative sense that he who does not advance goes backward. It may be that the multiplication is bad enough to be a mystery to others as well as yourself. But why test it again? Why not *teach* a little for variety?

The fact that the capitals of the South American states are a hopeless chaos in your pupils’ minds may be beyond all question; but you have spent three days already in your grim determination to have that one thing thoroughly done before attempting another. Is it worth another day? How much of your children’s lack of knowledge of the industries of those same South American states will have to be charged to the four days spent on capitals?

Perseverance is a good quality, and loose ends hanging here and there may spoil a piece of work. But there seems to me a painful lack of the idea of proportion in the minds of most teachers. And I believe that the daily plan encourages this lack, stimulates it, multiplies it, until it seems to me one of the most alarming tendencies in our teaching force.

What farmer, what merchant, what housekeeper plans only for the coming day? Have we not all a pitying scorn for those who live from hand to mouth? My “Down East” ancestors called them “shiftless,” and I think the word might well be applied to many teachers of my acquaintance.

The housekeeper who knows that the linen closet is stocked with piles of immaculate, daintily scented sheets, that the larder is equal to any emergency, that the lamps are trimmed and ready when the shadows fall, knows a peace which her shiftless sister can never hope to possess. And the teacher who is ready—not with to-morrow's number lesson, but ready with a plan which puts to-morrow in its proper place in the mosaic of the week, the term—has a vision clear enough to see the heights toward which she travels; while her perhaps equally conscientious neighbor, struggling on from day to day, may never see the glory of the hills beyond, but only the stones and pitfalls which beset her daily path.

Teachers have a reputation of being narrow in their views of life. And again I say I believe the everlasting daily planning helps to make them so. Get away from your work, my friends, far enough to see it all, once in a while. Is it a term's work in arithmetic? There are essentials and non-essentials, even in arithmetic. How can you distinguish them with the whole so close before your eyes? Percentage, interest, profit and loss, customs and duties, taxes, bank discount, true discount, partial payments, averaging of accounts, square and cube root—"there is the list," you say, "as the course of study gives it. What have I to do except to take them up, one by one, and teach them?"

Much, my friend. There are subjects on that list that most of your pupils will scarcely hear mentioned after the school doors have closed behind them. Mental discipline? Yes, no doubt, but will you give a week to averaging accounts for mental discipline, and only the same time to interest for mental discipline, plus practical, every day value? I leave it for you to say.

The first step, it seems to me, in planning a term's work—or if your course of study is outlined by years, a year's work—is to stand away and look at it broadly. Seek for relative values. Then try fitting the work to the time.

Ah! now there is trouble. One says "Our course is *crammed* with work. I never get through." Very likely. The teachers whose day books never leave their hands frequently don't get through. Sometimes the teachers who plan on a larger scale don't either, but they are more likely to than their near-sighted friends.

Another objection—this time with a frown: "How can I tell whether my class this year will be bright like the one two years ago, or stupid like the last one? That bright class learned long division in a week. The other one took six!"

True, classes vary, and time must vary with them. But which is better, to struggle along with a slow class, taking double

time for everything, and leaving untouched at the end of the term perhaps the most important of all; or, with relative value always in sight, to so adjust the time that the non-essentials will be slighted, if something must be, and the essentials saved? And how can you do it, except by a broad survey of the whole? The wise teacher never makes her plan to cover every day or every week of the term. Leave a little "unassigned time," as we call it on our programmes. It will give elasticity, buoyancy to your plan, and peace to your soul.

The next step, and after all only the first step repeated on a different scale, is the making of a plan for every topic you have assigned a place on your yearly plan. Again, *relative value* must be your watchword. "What can I do in a week on South America?" You might spend a week teaching your class to make accurate memory maps of the continent, but it would scarcely be wise. Throw out the non-essentials, and make your mental question, "What of all things I might teach about South America, if there were time, shall I select as most likely to make this week's work tell, in broadening these children's minds." The process of elimination is useful in other lines than mathematics.

Let us suppose the topic planned. What next, Now, if you like your daily plan—but I doubt if you need it after all. That topic in geography or history or language that you have pondered over—has it not become almost a part of yourself? Here it lies before you in your note book—two weeks' work on the Pilgrims at Plymouth. That means, perhaps, six lessons, and with that fact in mind it is more than likely that your planning of the topic has fallen naturally into six parts. Suppose—well, suppose anything you like. A slow class? Draw upon your unassigned time. A very bright class? Do additional outside work. A lack of interest? Search your plan and your preparation. It is possible that you have planned for yourself rather than for your class. There are thousands of contingencies that may arise, but well planned work usually slips along with remarkable smoothness. Whenever some obstacle does appear, learn to adapt. Your plan will not prove the hindrance you anticipate. It will, whatever comes, be a prop upon which you can lean and be at ease.

Does it sound like a great deal of work? Perhaps—but it is work that helps to make peace in the school-room, and a sense of security in the teacher's mind. If you are skeptical, try it with one study, and observe the sense of relief with which you turn to that hour in the tumultuous day. You are ready for it. You know not only about to-day's work, but you can fit

to-day's work into the perfect whole. And when you have tried it with one, you will try it with all. You will cultivate a broader view of things; you will become expert in finding relative values; you will learn to cast out, without fear, the non-essentials; and you will achieve an occasional evening to devote to that old dress, if it needs your attention.

The Relation of Geography to the Other Subjects of an Elementary Course of Study—By Supt. T. H. Armstrong, in Education.

Just what constitutes geography has never been clearly defined. The text-book says it is the science which describes the earth. It has four sub-divisions: political, physical, mathematical, and commercial; each defined respectively as the branch of geography which treats of the earth in relation to man; in relation to nature; in relation to the other planets; and in relation to the commercial transactions of men.

While for convenience these four subdivisions have been made, on reflection it becomes evident that they are entirely inseparable. We speak of night and day; but our wisest philosophers have never been able to make clear the line of demarkation. Would it be possible to teach a child the location of a volcano without teaching something of the phenomena connected therewith? How could you teach him of the tropics without reference to the earth's revolution around the sun and the inclination of its axis? It would be likewise senseless to attempt to teach the child of our great lakes, rivers and oceans, without teaching him something of their use as commercial agencies.

Intimately associated and interwoven with geographical study is man. Man is the real center in the study of political and commercial geography. He is the clearer of forests, the drainer of marshes, the builder of cities, canals and railroads. He is the living, active principal who fills the uninteresting earth with life and interest. The child cares but little for the earth, its formation or subdivisions only as a man has given to it life and interest. The plant and animal life are subordinated to man's use. And plants and animals, because of their dependence on soil and climate, make these particular phases of study of interest.

It is thus easily comprehended that geography embraces not only the subdivisions enumerated above, but much of the material classified under the head of geography is, in reality, history, zoology, botany, geology and astronomy. But to know much of

these subjects in their relation to man must necessitate the liking of another and very important branch, namely, literature. In acquiring a knowledge of these branches a child must broaden his mental grasp and enlarge his fund of ideas: but as language is but the expression of ideas, language may be added to the list of subjects closely allied to geography.

Very likely the arguments presented above will be conceded by many teachers, but that the teaching of these subjects should be correlated or coincident will be denied by many for the following reasons: First. Geography as already taught, covers a period of eight years. To drag in all this added material would materially lengthen the course. Second. There is a beginning, a middle, and an end to each of these branches of study which is not coincident with geography.

That geography as generally taught requires eight years, I grant. That so much time is necessary, I am not so ready to concede. The proper food for a babe is milk. If we feed him beefsteak, pork or beans, his stomach rejects them. Why? Because nature did not make a baby's stomach for such food. Feed him the beefsteak later and he enjoys it—not only does he enjoy it, but he thrives on it. Possibly by using certain artificial drugs we might succeed in feeding solid food to very young children, but no one believes for a moment that they would be healthy under such treatment.

There are two plans for teaching geography in common use; the text-book plan which begins the study with certain formal definitions, and the later but more generally accepted plan of beginning with the immediate locality of the child and proceeding by gradual steps to the village or city, township, county, state, country, etc. Of these two, by far the most rational is the latter, but both are bad. Such a mental diet is worse in effect on the mind than pork and beans on the digestive apparatus. It is a veritable hard-tack. What does he care about the earth or its position in space? Why should he have interests in boundary lines, cities and villages remote from his environment? Learn them, of course he will, because the good Lord has given him a memory; but such have no interest for him. Proceed then, by requiring him, later, to locate each day ten or fifteen unheard of places with strange foreign names, made up from four to ten syllables, and let his geography lesson consist largely of this from day to day. Is it any wonder that eight or even ten years, as is often true, is consumed in this sort of a mental "cram?" Is it any wonder that mental nausea and intellectual dyspepsia is too often the result of this forced and unnatural school-room diet? The reason, then, that eight years is con-

sumed in the study of geography is because it is taught in such a manner as to stifle interest rather than to stimulate it.

As intimated before, the child is first, last, and all the time interested in man: what he does, how he lives, what he wears, what he eats, etc. It is, of course, conceded that the child is always interested in his environment. Having gathered certain geographical conceptions from his surroundings by means of field excursions and familiar talks with his teacher, such as describes the atmosphere, moisture, heat and their influence on life, also certain definite conceptions of land and water formations, and having had his curiosity aroused by coming in contact with people from foreign lands; he is now prepared to listen with interest and enthusiasm to anything he may be told or anything which may be read to him about curious or primitive people in other lands. At first he has no interest in definite statements of time or place. "Once upon a time," or "In a country far away" is sufficiently definite for the child; but gradually he comes to desire to know where these places are. The map may now be utilized to give to the stories of myth and legend a "local habitation and a name." From the fairy story, the myth, and the legend he now begins to desire true stories, mostly of heroes. "Is it true," is the question always first to follow a story. These stories he wishes to give definite location that they may be the more real. Each of these periods in the child's life, we shall designate respectively as the "Mythical" and "Heroical." The first extending through the first three years of a child's school life, the second through the next three years, and the third, the thinking or reasoning period, has its beginning in the seventh and eighth years, and continues on through the high school.

During this first period the child gains a knowledge mostly of curious and primitive people of the globe, and a general knowledge of the relative position of the continents, oceans, and some of the leading countries. He also acquires a taste for and interest in the best of literature and history—for mythology is but primitive history and literature combined.

During the second period he becomes acquainted with the great characters who have made history and literature and who have developed the arts and sciences. He thus strengthens his desire for history and acquires a fair knowledge of the geography of all continents. He knows considerable of great authors and their homes. If wisely taught, he has either read or heard read some of the productions of these authors suited to his age. He has seen copies of the great masterpieces and has some knowledge of the great masters. He has become acquainted with

the animal and vegetable life on sea and land in connection with his studies concerning what men do. He knows much of the influence of climate and soil on productions and the westward advance of civilization. He is able to state the cause for the location of great cities and has especially become interested in the development of the western continent.

Of course, during both of these periods, the child has been led to express himself freely in both oral and written language. In the latter he has been taught capitalization, the easier forms of punctuation, correct spelling, paragraphing and neatness. In the former he has been taught to stand on his feet and express himself clearly in the presence of his fellows.

Fortified now with a broad and general knowledge of the world and its people, in all their relations, and able to express his thought clearly, if not always grammatically, the child enters the third period of his elementary school course well prepared to think clearly, reason logically, from cause to effect, and express clearly his conclusions. He is certainly well prepared now to study geography and grammar as sciences and to take up the definite study of some masterpiece in literature. After a year's study, he should be prepared to finish geography and take up in connection with his study of grammar and literature an intensive study of American history.

After eight years, the child is well prepared to enter the high school, well qualified to do his work thoroughly in history, literature, language and the sciences.

It thus seems that literature, history, nature-study and geography may be correlated. That the literature and history may proceed co-incident with geography and each conform to the best accepted principles of pedagogy by beginning with that which is primitive and childlike, and allowing each to grow conformably with the mental development of the child.

We do not by any means attempt to say that all the knowledge attainable from one branch of study can be correlated with that of another. We have attempted to show, simply that correlation does exist and can be utilized in acquiring much of the knowledge attainable from most of the branches of study used in the primary and grammar school. And that as an advance knowledge of any subject is attained, each subject of study may be more isolated and studied as a separate science, also that time is saved; the intellectual horizon broadened; interest stimulated; reason strengthened; and of course character broadened and developed.

By bringing all knowledge to the mind with its relation to other branches of knowledge made evident, we are doing what

eventually must take place in the mental process of assimilation, before any knowledge can be apperceived.

In this paper we have attempted to show that geography is really much broader than the text-book definition would imply, that neither of the much used plans of procedure is rational with the mental growth of the child, that interest in man leads to interest in geography, and that this interest should precede a formal study of geography, that this interest may be aroused by following the scheme of study having its inception based in the interest aroused by a knowledge of mythical and heroic characters: that when a child is ready for a study of real characters he has an interest for the study of geography because he desires to give characters in whom he has interest, a definite habitation; that having the acquired interest it is an easy step to lead him to further geographical research ultimating in a breadth of knowledge and a mastery of facts from which he is able to make some deductions and draw reasonable conclusions. By this method he becomes reasonably well informed in history, literature and nature-study and is now well prepared to think independently and reason logically. The ultimate result of this is to develop a well-rounded, sturdy character, thoroughly prepared for the high school, or if necessity compels to go forth into life, fairly prepared for the duties of citizenship, with a desire created for the best in literature and history and ability to earn an honorable livelihood. To some, this may seem an idle dream; but the scheme has been thoroughly tested in practice and has proven worthy of all claims here made for it. The plan is not irrational or difficult, and certainly merits a fair trial by all teachers interested in bringing about the highest mental development of those intrusted to their care.

Kindergartens—By Wilson Farrand in *Educational Review*.

Of the problems that concern the school, the first that thrusts itself upon us is that of the kindergarten. It is with fear and trembling that one ventures upon this topic, for he is a brave man who dares to lay profane hands upon its sacred mysteries. Let me hasten to assert that I am not attacking the kindergarten. I am simply suggesting, with all possible deference, that the last word about the kindergarten has not yet been said, that there is still a problem to be solved, and a problem not altogether easy of solution.

The problem of the kindergarten is suggested by its results. Of its excellent results when applied to the children of the very

poor, often with intellects stunted by improper nourishment and unfavorable surroundings, there seems to be little doubt. In fact I am not sure but one can say with safety that the kindergarten is admirably adapted to the children of the very poor and of the very rich, whose parents alike, because of ignorance or because of indifference, because of stress of life or because of social strenuousness, are unable to give them that care and that training that come best from the parent's hand. With the bright, normal child, however, coming from the typical American home, the results in many cases—not all—are such as to arouse serious question.

It is difficult to summarize these results with confidence and accuracy, for it is not easy to tell with certainty how much is due to the child's personality and home training, and one is soon forced to the conclusion that there is as much difference between individual kindergartens as between individual schools of higher grade—or even as between individual colleges. Still, in spite of the difficulty of the case, certain impressions are formulating themselves with growing distinctness in the minds of careful observers. There is an increasing distrust of the physiological soundness of some of the kindergarten ideas, caused by the many cases of eye strain and nerve irritation that appear to be traced directly to its doors; there is a feeling prevalent that many kindergarten children develop an undue sentimentalism and an abnormal imagination; and many primary teachers are of the opinion that the children who come to them, while alert and responsive in mind, are lacking in power of continued application and in capacity for independent work. There are no new criticisms, but the number of those who make them is increasing, and they cannot be lightly brushed aside.

A little study of the kindergarten, its origin, its theory, and its growth, throws some light on the subject. Froebel was a great man, with a keen insight into child nature. He was an educational prophet, with a message of truth and of power, but he was not inspired, and he was not infallible. His pedagogy was better than his philosophy. His educational precepts are often distinctly sounder than the symbolic and mystical ideas on which he bases them. He developed a system of elementary education in many respects admirably adapted to child nature, but curiously permeated with his symbolic ideas. It was a system adapted in its external features to the children with whom he came in contact, stolid German children, largely of the peasant class and from three to five years of age. Now, given a system like this, based on an everlasting truth, but permeated by a questionable and seductive philosophy, and adapted in its external

features to children of a particular type, is there not call for unusual judgment and discretion when it comes to developing the system and applying it to children of another race and temperament? When it is interpreted by immature young women, frequently of the sentimental order, who after a "normal course" of a few brief months are graduated as priestesses of the mystic cult, and when this system, so interpreted, is applied to high-strung, nervous American children of six and seven, often two and sometimes three years beyond the kindergarten age, is there any wonder that the results should be what I have said observers find them?

Let me repeat that I am not attacking the kindergarten. I am only trying to save it from its friends. Let me also hasten to add that there are kindergartens and kindergartens, and that the results are not all alike. My object is simply to raise the question whether the kindergarten enthusiasm has not outran itself, whether there is not good reason for feeling that the development of the kindergarten in this country has been too rapid for normal, healthy growth, and whether the problem thus raised is not one that in its solution calls for the highest and the best educational thought of the country?

Department Work in Grammar Schools—By Supt. Frank M. Cooley, Evansville, Ind., in *The School Journal*.

Department work in grammar grades of the public schools has attracted some little attention in certain quarters, during recent years, and it may be interesting to gather opinions, based upon actual experience as to the results. If department work is a help to the young people in grammar schools, if it gives additional incentive to work, if it strengthens the teaching force, if it makes the boys and girls more self-reliant, then it would seem that wise policy should make it a part of the regular school work wherever practicable.

The following opinions are based upon nine year's experience with department work in the same system of schools. The plan has been in operation in the sixth, seventh, and eighth grades only, as experiments have prove that it is not well adapted to the lower grammar grades.

1. Department teaching gives teacher an opportunity to specialize. It gives teachers an opportunity to push investigation to some definite conclusions, and to make immediate use of such investigations. It also affords an excellent opportunity

for teachers to teach such subjects in which they themselves are naturally interested—this is not possible when the entire range of school subjects constitutes a teacher's work.

2. Department teaching gives a teacher a wider range of the subject taught, as the work assigned to any one teacher covers a period of three years, instead of being confined to one half year or one year, at most. This is a great strengthener, in as much as the weaknesses which usually crop out in the higher grades because of faulty work in the grades below, may be anticipated and thus avoided. One of the most glaring weaknesses in the usual methods of assignment of school work is the narrow range of subjects—a few pages in grammar—a few pages in history—and these are so sandwiched into the course of study that the teacher scarcely realize anything of value from the work that has preceded, and is little interested in that which is to follow.

3. Department teaching strengthens the teaching corps, because teachers are now lined up beside each other, and comparisons are easily and naturally made. It is true that the weak teacher now comes into contact with a larger number of pupils, and such influence cannot be but harmful, but it is also true that the strong teachers come in touch with more children. But the strongest feature at this point is that teachers themselves are spurred to do their best as never before. If five teachers get on well with a certain school, while the sixth is constantly in trouble, either in matters of discipline or in inability to interest the pupils, the question naturally arises, "Why this difference between my work with this school and the work of another teacher?" "Why are they disorderly when I am in charge, while they are orderly at other times?" "Why are they uninterested in the subject which I teach, while interested in all other subjects?" Sooner or later this teacher will awake to a realization of the fact that the "fault is in herself," not in the subject taught or in the pupils.

4. Department teaching relieves monotony and children enjoy the change. This is not a slight factor in favor of this division of school work. In the lower grades children attend school because they must attend, even if they choose not to do so. In the upper grammar grades other incentives than the "must" are necessary, and the variety given the school life by a number of different teachers is no small part of the interest demanded to hold pupils in school. Pupils always enjoy the change. They say "The time goes so fast now." The monotony which once was has given way to greater variety, and has added interest to the life of the school.

The American Teacher—By William H. Maxwell in the Educational Review.

If education is necessary to conserve the two main objects for which society is organized—to promote individual development and to secure equality of opportunity to all; if, further, universal education is necessary to the preservation of our republican institutions ; and if, lastly, education involves the development of the highest ethical qualities, as well as the acquisition of our intellectual inheritance, in order to adjust the child to his environment; surely it follows that the person to whom this all-important work is intrusted cannot be too accomplished, cannot be too highly trained, and cannot be held to too rigid an accountability. If we think of the teacher's work as the foundation and the safeguard of our political institutions, we may not unreasonably suppose that he should possess some of the attributes of a statesman. If we keep before our minds the vast task of introducing the young into their intellectual inheritance, we may look for the mark of the philosopher. If we think of his duties in the inculcation of a high morality, we may regard him as "an under-shepherd of the Lord's little ones," even as a great evangelist. If we think of the battles he is called upon to fight, especially in our great cities, against ignorance and vice and against the abhorrent forces that would prostitute the public schools to selfish purposes and drag them in the mire of party politics, we may think of him as the soldier of a hundred battles. Ofttimes, too, when we see his high-mindedness in presence of affront, his fortitude in resisting tyranny, and his patience in opposing intrigue and enduring scandal, we should not be far amiss in placing the crown of martyrdom on his brow. There are few in whom are found mixed all these qualities of the ideal teacher. One such there was, however, whom Chicago knew well—Francis Parker. Him the University of Chicago delighted to honor, for he was a statesman, and he was a philosopher, and, he was an evangelist, and he was a soldier, and in very truth he was a martyr. The memory of such a martyr is the seed of the schools. To few in any age are given the great abilities and the great opportunities that made Francis Parker the heroic figure he was. Yet none need despair. The opportunities for efficiency come to every teacher. The humblest mistress in a country school, who inspires her pupils with the thirst for knowledge, the love of truth, and the desire for the higher life, is as truly in the class of real teachers as Socrates or Froebel, Pestalozzi or Parker.

A Fundamental Error—Editorial in *Atlantic Educational Journal*.

One of the fundamental, and often fatal, errors of the teacher and the school course is the attempt to educate the children for some fancied higher mission in life—"higher sphere," it is called.

I once said to a teacher, "Let's make our teaching take hold on the lives of these children in their homes, and in the homes which they will make for themselves as carpenters, bricklayers, plasterers, blacksmiths, small farmers, small merchants, ordinary citizens, or the wives of such." She replied, "But they must not follow these occupations. I cannot bear to think of their doing so." So, apparently, think many teachers, and they would educate all the children for teachers, clerks, gentlemen of leisure, speculators, or "to get office."

But the great majority must follow the less honorable callings of their fathers—if, indeed, any one calling or occupation is more or less honorable than another except as it be more or less honestly or skillfully followed. The masses of children—every child—must be educated; but educated to fill more completely the sphere to which nature and circumstances have called them—to be discontent, not at laboring at the common tasks of life, but at performing them unintelligently and unskilfully. To put intelligence and skill, heart and soul, grace and culture, into all necessary labor and into every condition of life; to remove from these the grinding and despairing slavery of blind and helpless ignorance; to turn the "hand" into a living, thinking, feeling, æsthetic, ethical human being; to enlighten, purify, and sanctify every walk of life—this is the purpose and the mission of education. This is what Pestalozzi had in mind when he proposed to regenerate and save the world by the power of universal education. "I will turn the car of education around," said he. It should no longer tend toward that which is foreign to the child's life, burdening it with a load of erudition impractical and impossible of assimilation; but it should bring the child to the full possession of that which touches its every-day life. Gertrude, with her own children and the children of her unfortunate neighbor, became his model. It is through the agency of education of this kind that the world must be redeemed.

The teacher's prayer should be, not that his pupils may be taken out of the world of their fathers, but that they may be saved from the evil of that world. If there be those capable of rising to higher things, the firm and ample base provided by this education will form their surest support for the higher life.

Excess Drill on Non-Essentials—Edwin C. Broome, in *Education*.

Another means of reducing over-strain is to prune out non-essentials, and teach the essentials better,—a process of shortening and enriching the elementary school course. We Americans have the pernicious habit of marking progress by pages, rather than by topics, or better, by degrees of mental strength. Many superintendents map out the work in that way in certain subjects, and expect a high degree of thoroughness in the work assigned. Arithmetic is the worst offender in this respect. Teachers drill, drill, drill, as though salvation depended on the complete mastery of each page and every precious example upon it. When, as adults, we stop and realize how little arithmetic is really necessary for an intelligent person to succeed well in life, we must confess that no subject in the curriculum could be so readily dispensed with as an independent study as arithmetic. It is doubtless true that all the arithmetic an intelligent person needs can be acquired, with good teaching, in two or three years. The undue emphasis put upon arithmetic is due to our exaggerated idea of the value of accuracy. We habitually demand of children a degree of accuracy which we as adults seldom possess or find it necessary to possess. We teachers seem to have a peculiar horror for gaps in the education of our children; as though a fact not learned today never would be learned, and would somehow be a stumbling block for future success and happiness. Until I visited a school-room once last year, I never knew that there were five distinct kinds of decimals,—finite decimals, infinite decimals, circulating decimals, pure-circulating decimals, and mixed-circulating decimals. When I realized suddenly that I had been using decimals for several years in making up a school register or calculating the interest on my little bank account, ignorant of this hiatus in my knowledge, the discovery came like the shock of a lost opportunity, never to be regained. How many of us have been seriously handicapped because we never knew all the capes on the coast of North and South America in their order? It is thoroughness in such non-essentials as these that make school life a burden to many a child. No wonder a bright boy frequently brings us to our senses by the query: "What's the use in learning all that stuff?" It isn't a matter of great importance that a child know the name and location of all the capitals in the United States. Few adults, except professional teachers, know them. Capitals are frequently insignificant places from a geographical point of view. It is as useless, also, to teach children carefully the boundary of Patagonia or the Soudan.

There is no mental training in such work, nor are the facts themselves of any significance. Thoroughness is a lame excuse for such teaching. In both arithmetic and geography there are things far more important than these. Under ordinary conditions a pupil has 1600 lessons in arithmetic during his passage through our elementary schools. The French boy during his elementary course has about one-third as many. Yet, as President Eliot says, "The French are quite as skillful with numbers as the Americans." The subject of arithmetic can be shortened one-half, and, at the same time, greatly enriched by cutting out unnecessary and confusing distinctions in topics, by reducing the number of examples to be worked, by avoiding all unnecessary puzzles, and by more skillful teaching.

What Business Men Think is Needed—From the Minneapolis Times.

Not very long ago the New York State Teachers' Association inaugurated some very interesting investigations relating to the effectiveness of public school work in their state. They sent queries to four hundred and nine prominent business men and asked these men to say from personal observation whether the schools, as now organized, properly prepared children to earn their living, and in what way instruction might be improved to that end.

We have not room to quote the consensus of opinion upon all the various queries asked, such consensus appearing in a recent number of the Commercial-Advertiser, but the following suggestions strike us as being particularly forcible and valuable to all who have official connection with public schools:

Insist on accuracy in arithmetic.

Have more male teachers.

Teach boys "how to think."

Have lectures by successful business men.

Give us practical arithmetic.

Special instruction to defectives must be provided.

Make the English work practical as well as cultural.

Have a gymnasium in every school.

Favor restriction rather than expansion of the course.

Of the four hundred and nine men very few failed to have a good word for the high schools. Most of the men said they would prefer a high school graduate, other things being equal. All, however, were in favor of greater care in the primary grades and all recognized that without a good foundation the superstructure would be unsatisfactory.

THE INSTITUTION PRESS.

Compulsory Education and Its Relation to the Defective Classes.

The following is part of a paper read by Mr. Henry W. Rothert, Superintendent of the Iowa School for the Deaf, before the Quarterly Conference of the Board of Control and Superintendents, at Des Moines, and printed in the Hawkeye. After a full and convincing exposition of the merits and obligations of compulsory education in general, and the Iowa law in particular, he makes this powerful plea for the deaf and other defective classes :

The law is not as broad and extending as it might be, not covering all cases of voluntary or enforced absenteeism, nor is it as definite in its coercive restrictions as its most ardent friends would desire. It must be regarded as the pioneer measure recognizing and incorporating into our statutes the principles of Compulsory Education.

In its enforcement errors, omissions, and imperfections will be discovered and the same remedied, inserted, or removed by future legislation.

The term "proper mental and physical condition" should be modified and qualified. It is here where the line of distinction is drawn. These words form the verdict which sends the normal child to the opening portals of enlightening education, while it commits the defective child to within prison bars of debasing ignorance.

The more favored brother and sister by the strong arm of the law are removed from careless, indifferent supervision, while the less favored having no legal rights are compelled to remain where no authority can reach, no law protect.

The child who through sickness, accident or inheritance wanders in mental darkness, or who in visionless apathy experiences only its animal cravings, or who isolated and alone is beyond the reach of the human voice, is certainly entitled to legal protection, to legal assistance.

The mental germ can be stimulated and developed, the morbid apathy of a sightless soul changed to an intelligent realization of a spiritual existence, and the cheerless isolation dissolved into conditions surrounding a social, intellectual and moral being.

True, the developing processes are different, and certain temporary or permanent physical deficiencies may debar the attendance of a defective child, at what is commonly termed the public school, yet, recognizing the rights of this class, as well as protecting the community at large, the state has erected and is maintaining institutions and schools in which special methods for their betterment, improvement and education are practised. The doors of these institutions and schools are open and room provided for all. Why not compel the attendance of every child ready to enter?

Why exempt from the operations of a beneficent law a class for whom compulsory attendance means more by far than it does for the majority?

With ignorant and vicious parents it is the defective child which is made the target of outbursts of temper and passion, which is chained down to the menial servitude of exacting drudgery and which when by animal instincts it escapes from the cutting stings of the parental lash, becomes a prey in the outer world to immorality, vice and crime.

But there is another class of parents far different in type and disposition, whom no intelligent appeal will influence, no picture of the darkened future of their child attract, who are guided only by their emotions and whom only the enforced requirement of such a law can reach. Actuated by parental love, centering their affections upon the defective child, separation from it is nigh to saying "good bye for ever."

Years come and go and that darling child is retained at home, growing up in comparative ignorance to be in after life a shame and a curse to that weak yet loving household. Strange as this may appear, many such cases come under the observation of those connected with institutions for defective youth.

At the opening of our school this year a deaf boy 10 years of age was brought from a distant part of the state by his father who had thus been prevailed upon by his neighbors and the minister of his church. Remaining with us a day, and returning the following day, he sought and received all pertinent information, visited school rooms, dining room and dormitories, conversed freely with officers and teachers and became so satisfied and impressed that he thanked God such a school ex-

isted within the boundaries of Iowa. The boy was duly enrolled, sent to his class and was contented.

But when the parting hour arrived, the dread of separation overshadowed the father's judgment and holding tenacily his boy by the hand, with tears gushing forth profusely he said: "It is all right but I cannot leave him, I must take him home again." He left with his boy. For that father a compulsory law is humane, for that boy a right.

There is yet another class of homes so called at the hearthstones of which stands the destitute defective child in utter desolation and helplessness.

It is where the illiterate foreign immigrant has his abode and rears his children. A stranger to our customs and institutions, shiftless and careless as to the future, governed solely by self, he pays no heed to the conditions of his ever increasing family save and except when the members thereof can contribute to his own desires, gratify his own appetite and provide for his selfish indolence and comfort.

His feeble-minded, blind or deaf child is as rubbish in that unholy hovel, treated as unclean and as an interference, as the whims of superstition or the whiles of debauchery may prompt.

Should not the law in its majesty interfere and wrest from the clutches of such degrading influences and surroundings the innocent though defective, the poor but human child?

In passing may we express the hope that the measure now pending before congress to debar all illiterates be speedily passed and approved.

Not so with the intelligent foreigner who seeks in a free country the future happiness and welfare of his children. He soon identifies himself with church and school, perhaps that church in which he can worship according to the dictates of his own conscience and that school that is presided over by his own countrymen, and yet even with many of these there is an unwarranted disposition to retain the defective child at home, either by reason of ignorance as to the blessings extended by our public institutions or through fear the child (as partly at least in the case of the deaf) will acquire a language different from its mother tongue.

To all such a compulsory law would be no hardship: on the contrary by the machinery of its enforcement a knowledge of the advantages and results of methods and training for the defective classes would be brought to their own, yea to every fireside. The information so transmitted would be accomplished by the mandatory order to avail themselves of the opportunities offered and provided for.

Concerning admission to the Institution for Feeble-minded Children, the organic law provides "every child and youth residing within the state, between the ages of five and twenty-one, who by reason of deficient intellect is rendered unable to acquire an education in the common schools is entitled to receive the physical and mental training and care of this institution at the expense of the state."

The wording should be changed so as to read in substance "every child, etc., *must* receive physical and mental training at this institution or elsewhere at the expense of the state or at the cost of the person responsible for said child or youth."

Why compel the taxpayers of Iowa to establish and maintain an institution, the advantages of which can be accepted or rejected according to the inclination or whims of a small minority of its population?

Why not protect the property holder in his forced investment and reimburse him by the return of interest in relief and protection?

Relief as to the daily observance of and occasional contact with the so-called "lower grades" and protection from the irresponsible acts and possible irregularities of the immature and undeveloped at the time and in the future.

And as to the child, let the mandatory power of the state extend over this defenceless, unfortunate one, superceding the authority of the parent, and vouchsafing a chance at least for a possible release from the bondage restraining its imprisoned soul and in accordance with a more than human mandate: "Inasmuch as you have done it unto one of the least of these you have done it unto me."

The law establishing and making provisions for the government and maintenance of the College for the Blind recognizes the right of these sightless children to an education at the expense of the state. With this class no mental deficiency retards the developing processes, the germ of intelligence rests with the blind as with the seeing and they are as responsive to intellectual training as their more fortunate brothers and sisters.

The fact that there are comparatively few in any community can not be urged as a reason why a compulsory attendance law should not be made applicable to them. If "Education is in the highest sense the charge of political society, an important agency for the promotion of morals and an assurance for continued progress for everything that is wise and beneficent in our present civilization," then society in organized government should see to it that no exemptions whatever be permitted and that no local influence of any kind deprive any child of the opportunities offered.

Providing opportunities and not compelling their acceptance is like tilling the soil and not putting in the seed.

Education is a greater boon for the deaf than perhaps for any other class of children. Totally debarred from intercourse with the speaking world by reason of his want of means of communication in infancy and early youth, he pleadingly follows in anxious but mute expectancy or obedience the awkward gestures and facial contortions of his kindred. His mental faculties implanted by an all wise Providence lie dormant by reason of the unyielding crust surrounding, and unless relieved he is condemned to a helpless life of mental inactivity and silent, hopeless seclusion. But when the crust is broken, an avenue to reach his inner soul provided, when means are placed at his command by which he can receive the impression of a dawning intelligence, he readily extends his receptive condition, and soon casts off the shell of ignorance and darkness, assuming his rightful position as a youth in pursuit of knowledge and consequent happiness. His defect (want of hearing) is no longer a bar to his mental development, and entering the race with his normal contemporaries he presses steadily forward and onward reaching the goal at the same place while perhaps not at the same time. After which engaging in the avocations of daily life, surrounding himself with the comforts of a happy home, accepted in intelligent society and endowed with the priceless inheritance of American citizenship he becomes the peer and equal of his fellow men. Should such a child with a such a future be restricted and restrained by reason of the indifference, ignorance, greed or sentiment of its parent?

In many of the European countries where the principles of compulsory education obtain, its sheltering folds are extended over the defective and the normal child alike. In our country but few states of the Union have recognized either the rights of the defective child or the community in which it lives or may live by authoritatively requiring his or her attendance at schools erected and maintained for their improvement and betterment. If the writer is correctly informed there is upon the statute books of only three states a compulsory law for the Deaf. It may be pertinent at the ending for the purposes of this paper to quote from one of these, the Oregon Law, as follows :

“Whereas the State has provided an institution for the free instruction of all resident deaf-mute children of lawful school age, every parent, guardian or person having control of any child or children afflicted with deafness, shall be required under the penalties hereinafter specified, to send such child or children to said institution for a period of not less than six (6)

months of each year between the ages of eight and sixteen years unless children be taught in a private school, etc. etc.

"There being no law compelling and requiring that deaf-mutes attend the deaf-mute school, and it being for the best interests of the people of the State that these children should be properly educated, this act will take effect and be in full force from and after the approval by the Governor."

[Note—Approved, February, 1891.]

In conclusion may I express the hope that these footprints thus clearly defined upon the golden shore of the Pacific Ocean, may ere long also be found upon the fertile prairies of Iowa—and that justice holding the scales with impartial hands will secure an equal poise as between the necessities of those endowed with a full measure of human senses, and the needs of those who though less favored by the possibilities of their future, add weight and consideration.

The Summer Meeting.

The directors for the American Association to Promote the Teaching of Speech to the Deaf at a recent meeting decided, according to the Silent Hoosier, to hold a summer meeting in Boston this year so as to enable those wishing to attend to take advantage of the low rates to the convention of the National Educational Association which also meets in that city. This is a very proper and wise move. If the meeting must be held in the east it is much the best plan to have it coincident with the great national educational gathering, or immediately thereafter, so that we of the west and southwest can afford to attend and attend too without being out half a year's salary. We certainly feel under obligations to the officers of the Association for this action. It is a course that we have advocated in season and out for years. The Association may rely upon a respectable delegation from Texas. Another very important thing the directors have decided upon is the holding of a summer school for the training of teachers in speech. This enterprise has been discussed and contemplated for several years. It was decided to have a school last summer on condition that a certain number pledged themselves to take the course and pay the tuition, but it failed to materialize for the reason that the required support was apparently not forthcoming. The reason for this lack of sufficient support was, as we maintained at the time, that the estimated expense to the teachers was placed too high.

Both the proposed tuition and the estimated cost of board was too high for teachers of ordinary means, the very ones who need to and would, under more favorable circumstances, avail themselves of the instruction offered. We trust that the plans for this year contemplate an expense within the reach of a greater number. At any rate, we feel very hopeful as to the successful issue of this year's venture. If the figures are not altogether too high-toned the Association may expect quite a number of teachers from Texas to take the course. We believe in progress down here and in securing the best of everything that we can afford. There was one feature in last year's plan which we believe was hardly a wise one. It was the one requiring teachers to have had one year's experience before they are eligible to take the course. This, in our opinion, should be abandoned, or at least modified. It bars out persons qualified in every other particular but that of experience who wish to enter the profession. Besides, it encourages the very practice which the Association should make it its object to break up, that of the employment by the schools of untrained teachers. If the Association does not wish to assume the responsibility of training green hands for a few weeks and then turning them out with a certificate to teach, they might require such to come for two summers before securing a certificate of proficiency. In other words, they might have a course for inexperienced teachers different from that for those who have had previous experience or give them thorough preliminary training the first year and let them take the course provided for teachers of experience the second year. By adopting such a policy the constantly increasing demand for trained oral teachers could be met and the Association would be instrumental in raising the general level of ability employed in teaching speech, an attainment which is or should be one of the primary aims of the Association.—*The Lone Star Weekly.*

Is Normal Sight Necessary?

Our attention has been called to the report of a school for the deaf in which the superintendent makes the assertion that only six per cent. of the pupils of that school are incapable of oral instruction. "Such instruction," writes the friend who brought the statement to our notice, "presupposes normal vision. Is there ninety-four per cent. of pupils in any kind of school with such vision?"

This brings up the question, "Is normal vision necessary to the success of the oral method?" We have not statistics at hand on the subject of vision among school children, but have seen assertions that in some schools wherein careful examinations have been made as high as forty per cent. of the pupils have been found with defective sight. Such statements, however, must be taken with consideration of the fact that there might exist slight abnormalities in the eyes of the children which were discoverable by the methods of examination, but which really are so slight as to offer no interference to the free use of the organ, and for practical purposes might be considered not to exist at all. But we believe from personal observation that in any school, deaf or hearing, will be found more than six per cent. of the pupils whose vision is so defective as seriously to interfere with their work. If, then, defective sight is a thing which prevents success in oral training, the case is made against the school which claims that only six per cent. of its pupils do not succeed by oral methods.

But is normal sight necessary to such success? To this our answer must be no. In the oral departments of every school for the deaf will be found pupils who wear glasses, and others who should. We have known adults who were very defective in sight to be excellent speech-readers and children who had to have seats closest to the teacher in the school-room who stood second to none in the class in their ability in that line. There seems to be something beyond the mere ability to see the movements of the lips and tongue which enables some to interpret those movements into speech. Just what this is has never been satisfactorily explained, and those interested fall back upon the time-worn and hackneyed remark, "Speech-readers are born, not made." There is a mental quality apart from alertness, educational attainments, or reasoning power,—a sort of instantaneous responsiveness to visual impressions which is not wholly dependent upon keenness of vision,—that makes a speech-reader. Fortunate indeed is he who possesses the faculty. To those who do not, speech-reading may be learned and practised with pleasure and profit, but not with the highest success.—*The Silent Hoosier.*

The Retirement of Hon. R. A. Mott.

The Minnesota Companion of February 11 tells of the retirement of Judge R. A. Mott from the Board of Directors of the State Schools for the Deaf and the Blind, the Governor

having failed to reappoint him on the expiration of his term, January 1. The Companion speaks as follows of his connection with these institutions:

Judge Mott's official connection with the Faribault state institutions has been completed by the act of the State Executive. But so long as those three great and useful institutions continue to exist and do their work, just so long will his name stand forth prominently in their history. He presided at their birth; he fostered them in the days of their infancy and weakness; and he glorified in their strength and achievements as years brought stability.

Hon. R. A. Mott was one of the three original Commissioners appointed, in 1863, to establish a school for the deaf and blind in Faribault. The other two Commissioners gave little time or thought to the matter, so that almost the whole work devolved upon Mr. Mott. Those early years of the school were most trying ones, and might well have daunted a less determined spirit than that of Mr. Mott. But the man who had fought his way through life from early boyhood against heavy odds, proved himself equal to the occasion, and the three great institutions that have grown from the small wooden store building containing seven pupils in 1863, are the result of his labors.

From his appointment as Commissioner in 1863 until his retirement, Mr. Mott has served continuously, except for a brief period in the sixties. It constitutes a course of nearly forty years in the service of the state. No question of his integrity has been raised in all those years and we believe that no man has ever served the State of Minnesota so long, so efficiently, and so faithfully, with so little material return to himself.

Iowa.	Council Bluffs School.....	46	64	66	66	70	66	95	110	24	24	33	33	38	55	70	66	95	100
Kan.	Olathe School.....	58	99	116	86	61	86	68	86	—	20	23	23	22	63	33	40	50	73
Ky.	Danville School.....	117	150	153	173	152	173	141	139	52	15	53	123	87	154	110	111	130	139
La.	Baton Rouge School.....	15	20	19	46	35	46	57	56	—	16	19	—	—	23	35	—	57	56
“	Chinchuba School.....	25	31	27	19	6	19	19	....	—	—	—	—	3	3	—	—	19	..
Me.	Portland School.....	40	55	64	84	70	84	82	87	40	—	—	—	—	—	—	—	—	—
Md.	Baltimore, Hollins St. School.....	26	27	25	—	—	—	—	....	26	27	25	25	26	26	—	—	—	....
“	“ McCulloh St. School.....	..	..	..	27	..	27	27	....	..	..	..	..	..	..	..	27	27	....
“	“ W. Saratoga St. School.....	—	7	17	15	28	15	20	15	—	—	—	11	9	10	15	15	—	15
“	Frederick City School.....	60	49	50	72	62	72	60	60	22	28	32	23	23	28	38	47	48	58
Mass.	Beverly School.....	15	17	16	14	14	14	20	—	—	—	1	1	2	—	—	—	—	—
“	Boston, Jamaica Plain School.....	..	..	..	29	13	29	38	39	..	..	..	..	..	..	13	29	36	39
“	“ Newbury Street School.....	99	106	115	124	119	124	127	125	99	106	115	110	109	116	114	124	127	125
“	Northampton School.....	131	145	145	150	150	150	145	150	131	145	145	152	158	156	150	150	145	150
“	W. Medford School.....	9	4	9	10	9	10	11	13	9	4	9	8	10	10	9	10	11	13
Mich.	Bay City School.....	..	..	..	..	..	..	5	6	..	..	..	..	..	..	..	..	5	5
“	Calumet School.....	..	..	..	..	..	..	..	8	..	..	..	..	..	..	..	..	..	8
“	Detroit School.....	..	..	10	30	9	30	36	39	..	..	10	6	10	8	8	30	36	39
“	Flint School.....	94	111	126	242	220	242	286	223	26	37	59	86	103	111	132	140	191	155
“	Grand Rapids School.....	..	..	..	5	..	5	19	28	..	..	..	..	..	..	..	15	19	28
“	Menominee School.....	..	..	..	7	..	7	5	6	..	..	..	..	..	..	..	7	4	6
“	Muskegon School.....	..	..	..	6	..	6	8	8	..	..	..	..	..	..	..	5	7	7
“	North Detroit School.....	42	40	34	27	36	27	26	33	42	40	34	34	37	—	36	27	26	26
“	Saginaw School.....	..	..	..	..	..	..	5	5	..	..	..	..	..	..	..	..	3	3
Minn.	Faribault School.....	99	115	107	68	85	68	59	62	37	10	18	19	52	56	63	68	59	62
Miss.	Jackson School.....	20	21	17	36	—	36	65	72	8	7	8	19	—	—	—	36	40	26
Mo.	Fulton School.....	68	61	66	65	76	65	64	81	10	5	15	24	52	66	76	65	64	81
“	St. Louis, Cass Ave. School.....	37	37	20	15	20	15	10	20	—	3	—	—	7	5	10	5	4	5
“	“ Henrietta St. School.....	23	29	27	30	32	30	30	37	—	—	—	—	—	—	—	—	—	3
“	“ South St. Louis School.....	7	7	10	12	12	12	12	15	1	2	—	2	4	4	4	4	5	4
Mont.	Boulder School.....	..	1	—	16	—	16	21	20	..	—	—	—	—	7	—	11	17	17
Neb.	Omaha School.....	78	77	89	87	87	87	79	90	44	31	35	32	84	—	61	63	56	7
N. J.	Trenton School.....	70	63	65	51	135	51	60	135	32	40	31	45	82	64	57	64	60	37

1 The words “or chiefly” were added to this description in 1896 and have since been used
2 Comprising in 1902 twelve Public Day Schools under one Supervising Principal.

Pa.	Edgewood Park School.....	64	46	73	41	43	69	87	95	128	148	14	27	30	41	43	—	—	95	128	—
"	Phila., Belmont Ave. School	29	37	43	48	48	50	60	60	62	61	29	37	43	43	48	50	60	60	62	61
"	" Mt. Airy School.....	262	304	350	428	411	440	453	470	470	471	262	304	350	388	414	440	453	470	470	471
"	Scranton School.....	48	56	59	69	74	80	79	73	80	81	48	56	59	69	74	80	79	73	80	81
R. I.	Providence School.....	53	51	60	59	58	58	61	63	65	62	53	51	60	59	58	58	61	63	65	62
S. C.	Cedar Spring School.....	26	29	27	30	32	34	35	34	38	42	9	16	13	27	32	34	35	34	38	42
S. D.	Sioux Falls School.....	12	16	30	30	11	22	—	—	9	9	—	—	—	—	—	—	—	—	—	—
Tenn.	Knoxville School.....	137	130	125	100	56	73	78	95	95	65	15	14	20	47	44	29	30	35	35	65
Tex.	Austin School (for colored).....	8	3	3	1	1	—	3	3	1	1	5	2	2	1	1	—	—	—	—	—
"	Austin School (for whites).....	39	33	40	40	74	74	92	163	197	238	39	33	40	40	64	64	92	163	197	238
Utah.	Ogden School.....	35	39	12	29	40	43	44	40	56	58	10	6	3	—	13	21	13	—	8	41
Va.	Staunton School.....	27	26	32	—	16	18	28	28	30	31	—	—	—	—	—	—	—	—	10	12
Wash.	Vancouver School.....	21	18	40	—	35	—	38	36	32	15	—	—	—	—	—	—	—	—	—	—
W. V.	Romney School.....	14	14	23	23	18	19	19	22	22	—	14	4	13	13	18	—	19	22	22	—
Wis.	Appleton School.....	—	—	—	—	—	—	6	7	6	6	—	—	—	—	—	—	6	7	6	6
"	Ashland School.....	—	—	—	—	—	—	8	8	8	9	—	—	—	—	—	—	8	8	8	9
"	Black River Falls School	—	—	—	—	—	—	6	4	4	9	—	—	—	—	—	—	6	4	4	9
"	Delavan School.....	57	81	81	87	100	107	88	121	123	106	57	76	81	87	100	107	88	121	123	106
"	Eau Claire School.....	—	—	5	5	5	7	11	12	16	18	—	—	5	5	5	7	11	12	16	18
"	Fond du Lac School.....	—	—	5	6	6	6	6	5	9	11	—	—	5	6	6	6	6	5	9	11
"	Green Bay School.....	—	—	—	—	—	—	10	8	7	4	—	—	—	—	—	—	8	7	5	3
"	La Crosse School.....	6	8	7	8	—	—	10	9	9	8	6	8	7	8	—	—	10	9	9	8
"	Marquette School.....	—	—	4	5	6	6	7	7	7	8	—	—	4	5	6	5	7	7	6	8
"	Milwaukee School.....	42	50	52	49	48	50	55	55	54	57	42	50	52	49	48	50	55	55	54	57
"	Neillsville School.....	—	—	10	9	12	10	7	9	9	4	—	—	10	9	12	10	7	9	9	4
"	Oshkosh School.....	—	—	—	—	—	—	—	8	5	9	—	—	—	—	—	—	—	8	5	6
"	Racine School.....	—	—	—	—	—	—	—	—	—	9	—	—	—	—	—	—	—	—	—	—
"	Rhineland School.....	—	—	—	—	—	—	—	—	—	5	—	—	—	—	—	—	—	—	—	—
"	Stevens Point School.....	—	—	—	—	—	—	—	6	5	5	—	—	—	—	—	—	—	6	5	5
"	St. Francis School.....	21	20	11	11	23	45	42	46	45	38	—	—	—	1	5	45	40	—	40	34
"	Sheboygan School.....	—	4	7	7	6	6	4	6	7	7	—	4	7	7	6	6	4	6	7	7
"	Sparta School.....	—	—	—	—	—	—	—	11	8	7	—	—	—	—	—	—	—	11	8	7
"	Wausau School.....	8	8	7	10	10	8	7	7	6	5	8	8	7	10	10	8	7	7	6	5
"	West Superior School.....	—	—	—	—	—	—	10	11	11	12	—	—	—	—	—	—	10	11	11	12

¹ In the statistics of the Fordham School the pupils of its Westchester and Brooklyn branches are included.

TABLE II.—SPEECH-TEACHING IN CANADIAN SCHOOLS FOR THE DEAF, 1893-1902.
Statistics compiled from the American Annals of the Deaf.

Schools for the Deaf in CANADA arranged alphabetically according to location.	Total Number of Pupils TAUGHT SPEECH.											Number of Pupils Taught Wholly or Chiefly by the ORAL METHOD.										
	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902		1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	
Man. Winnipeg School.....	6	6	11	11	12	16	15	12	14	15		—	—	3	8	7	9	10	12	14	12	
N. B. Fredricton School ..	2	3	22	22	25	20	25	26	28	...		—	—	—	—	—	20	25	—	—	—	
N. S. Halifax School.....	30	31	31	52	79	60	51	64	64	64		6	6	6	13	15	60	49	42	63	63	
Ont. Belleville School.....	48	45	49	47	54	57	60	60	60	60		—	—	—	—	—	—	—	—	—	—	
P. Q. Montreal:																						
“ Berri St. School....	93	109	107	96	101	100	112	116	104	112		93	99	102	93	98	93	105	108	104	111	
“ Mile End School.....	60	39	31	41	43	60	71	102	60	60		—	39	31	41	43	60	66	60	60	60	
“ Notre Dame de Grace Sch.	—	24	33	24	37	30	37	45	39	46		8	11	12	17	14	17	30	20	28	30	

THE SIGN LANGUAGE IN AMERICAN SCHOOLS.

OLOF HANSON, SEATTLE, WASHINGTON.

The following statistics have been compiled from the Annals in the same manner as in former years. In the Annals the various schools are recorded according to methods of instruction used as Combined, Oral, Manual, Manual Alphabet and Oral-Manual Alphabet. The Combined System schools employ all methods that have been found advantageous in educating the deaf, many of the pupils being taught entirely by speech in the class room. But it is generally understood that all or nearly all the schools reported in the Annals as Combined recognize and use the sign language for chapel services, public addresses, lectures, etc., although in many of them it is restricted or even excluded from the classroom. The Manual schools are similar to the Combined except that for lack of means or other untoward circumstances, they are unable to give instruction in speech. Manual Alphabet schools use the manual alphabet but reject the sign-language in and out of the classroom. Those recorded as Oral schools are supposed to exclude both the sign-language and the manual alphabet, although in point of fact this is not strictly the case in some of them.

Those classed as Oral-Manual Alphabet are understood to use the Oral and Manual Alphabet methods in separate departments and to exclude the sign-language. But in the Illinois Institution the sign-language is still used for chapel services, etc., practically as in other Combined schools, and therefore in these statistics this school is included among those that use the sign-language.

By adding together the number of pupils in the various kinds of schools, we have the following for the year 1902:

1. Sign-language used:			
Pupils in Combined Schools.....	8250		
“ in Manual Schools.....	105		
“ in Illinois Institution.....	484	8839	or 80.7%
<hr/>			
2. Manual Alphabet, but no sign-language :			
Pupils in Western Pennsylvania Institution.....	178		
“ in Mt. Airy, Manual Department.....	31	209	or 1.8%
<hr/>			
3. No Sign-language, no Manual Alphabet:			
Pupils in Oral Schools.	1433		
“ in Mt. Airy, Oral Department.....	471	1904	or 17.5%
		<hr/>	<hr/>
		10952	100.0%

Tabular statement of sign-language in American schools for the deaf from 1900 to 1902 inclusive.

Dates.	1		2		3		Totals.	
	Sign Lan- guage used.		Manual Al- phabet but no sign language.		No sign lan- guage. No Manual Al- phabet.			
	Pupils	P'tge	Pupils	P'tge	Pupils	P'tge	Pupils	P't'ge
1900, Nov. 10....	8645	81.5%	196	1.9%	1767	16.6%	10,608	100. %
1901, Nov. 10....	8967	81.3%	211	1.9%	1850	16 8%	11,028	100. %
1902, Nov 10....	8829	80.7%	209	1.8%	1904	17.5%	10,952	100. %

EDITORIAL.

The Annual Meeting

Elsewhere in this issue will be found the call for the Annual Meeting of the American Association to Promote the Teaching of Speech to the Deaf. It has been decided not to hold a Summer Meeting, as it is felt that few teachers would care to attend both it and the meeting of Department XVI (The Department of Special Education) of the N. E. A., and the Association does not wish to interfere in any way with the work of that organization.

The purpose in holding the Annual Meeting in Boston at the time determined upon is to take advantage of the reduced rates offered in connection with the convention of the National Educational Association to assure a large attendance for the consideration of important questions affecting the future work of the American Association. It is also desired to encourage members to become affiliated with the Department of Special Education and with the general body of educators.

The Department has not, in the past, received the encouragement it deserved from teachers of the deaf. This was no doubt largely due to its unfortunate designation as "The Department for the Deaf and Dumb, Blind, and Feeble-Minded." The change of name and the enlargement of its purpose—to consider methods of education for *all* children demanding special means of instruction—makes it now a dignified and important section of the general educational association.

Teachers of the deaf, of the blind, and of the feeble-minded each have their own conventions for the consideration of their special work. It would not be possible for the Department meetings to take the place of these, nor is it intended that they shall do so. The object, as stated in the platform adopted at the last meeting, is, "To bring persons engaged in the education of children requiring special methods of instruction into contact and affiliation with teachers in general for the interchange of ideas for mutual benefit."

This association with educators of normal children will be of great advantage to teachers of the deaf; it will be broadening, strengthening, educative; it will help to keep them out of ruts and increase their efficiency in a hundred ways. It should ever be borne in mind that we are training our children to take their place among normal men and women, on as nearly as possible an equal footing. It is the public schools that fix the standard of attainment, and a knowledge of what they are doing and propose to do is the best possible guide for determining the direction and the end of our own efforts.

It is proposed to send classes of the deaf and the blind to the St. Louis Exposition to exhibit before the general public the processes of their education and their attainments. That is good : even in the midst of the numerous attractions and distractions of an occasional great exposition people will learn something of our work and will carry away a better idea of what is being done for these children. But it will be better by far if, year after year, by argument and by visual demonstration, it be impressed upon the great body of educated men and women from all parts of the country who compose the N. E. A. that our institutions are schools, and that our graduates are fitted to discharge intelligently their duties to self and to society. It will not only benefit our schools by bringing them additional pupils and more liberal support, and the teachers by the enhanced consideration in which they will be held, but will make smoother the path of many adult deaf and blind by correcting misunderstandings of their condition and capabilities.

General teachers and the normal child will also benefit by the meetings of the Department, but on that point we shall not speak at present, merely referring our readers to the addresses before the last convention published in the *REVIEW* of October, 1902. What we wish is to impress upon all teachers of the deaf the importance of availing themselves of this opportunity to be enrolled in the ranks of one of the largest and most progressive bodies of educators in the world. To do so is not only a high privilege, but a duty they owe to themselves, to their pupils, and to the cause they serve.

S. G. D.

**Teaching by
Indirection**

No one will be found to question the value of system, whether in business or in study.

In the daily routine of life, we must have a fixed time for every duty, a regular place for every article.

So in our studies, although all truth is one, we must for convenience mark off certain boundaries to define the fields of geography, arithmetic, grammar and the rest, and these fields we must cultivate in a fixed order, to ensure regularity and thoroughness in our work.

Yet there is in education a danger that systematization may be carried too far.

Education is a growth, and while growth usually moves steadily on under fixed conditions, it receives, from time to time, irregular impulses which sweep it on at many times its usual rate. At such times the customary fixed regimen must be made to bend somewhat, if the best results are to be obtained.

In teaching we do well to take up one head of the subject after another in regular order, to make sure that nothing is overlooked.

But we ought, at the same time, to keep well in hand our reserves, whatever facts we may know about this universe, and constantly to keep in exercise the co-ordinating power of the mind to seize upon and bring forward whatever truth, from whatever quarter, will shed light upon the topic under consideration.

And very often the illuminating truth may be something apparently very far removed from the point in hand.

A side glance often takes in a little detail missed by a full gaze; a fire on flank may sweep away resistance that would check the most determined assault in front.

That teaching of a subject which confines itself to the textbook, or to the strictly logical development of facts, gives, as it were, only the ground plan and elevation of the edifice. We should have these accurate "to the nail," and as well, a picture which includes atmosphere, perspective, color and light and shade. It is the side lights from other sources than the book, from other, often remote, fields of study that give us all this wealth of effect.

This consideration should be a powerful incentive to study. How well we could teach anything if we knew everything !

Are we dealing in our work with a subject of study so simple that it seems hardly worthy of occupying our best efforts ?

But if we could know it, like Tennyson's flower in the crannied wall, roots and all and all in all, we should know what God is and man is.

WESTON JENKINS.

The newspapers have of late contained lengthy and enthusiastic reports of demonstrations made of the merits of the "Acousticon," which is said to be a great improvement on the "Akoulalion" and the "Akouphone," devised by the inventor of these instruments, Mr. Miller Reese Hutchison. A letter of inquiry as to in what respects it differs from the instruments with which the profession has been made familiar through numerous exhibitions at schools and conventions has brought the following reply from Mr. Currier, Principal of the New York School, who has seen it tested :

*Dear Sir :—*In reply to your favor of yesterday, making inquiry concerning the "Acousticon," and wherein it differs from the "Akoulalion" or "Akouphone," I would state that so far as I am able to determine, the difference consists in portability and adjustability, by which I mean that the size of the instruction outfit has been reduced from the cabinet or case to a hand size, and that the corresponding instrument to the "Akouphone" has been made adjustable to various degrees of carrying power, so that it will be to the ear what the various styles of lenses are to the eye. Other than that, there is no difference between it and the first instruments of Mr. Hutchison.

I might add that he has succeeded in perfecting a battery which is so small as to make it easy to be carried; the battery of course being the foundation upon which the effectiveness of the instruments rests.

Very truly yours,

ENOCH HENRY CURRIER.

It is encouraging to know that the instrument has been improved, for we are thus warranted in hoping that the principle upon which it works is a sound one and that it may ultimately be so perfected as to provide relief in many cases of deafness that have been considered hopeless.

S. G. D.

DEPARTMENT OF SPECIAL EDUCATION, NATIONAL EDUCATIONAL ASSOCIATION.

A request made to Mr. Edward E. Allen, President of the Department of Special Education, N. E. A., for information regarding the meeting in Boston next summer, has brought the following reply :

Overbrook, Pa., March 29, 1903.

MR. S. G. DAVIDSON,

Mt. Airy, Philadelphia, Pa.

My Dear Sir :—Arrangements have not yet been perfected for the coming meeting in Boston of the National Educational Association. However, much has already been done, and the program of the Department of Special Education is in good shape though not quite ready for publication.

The meetings will take place within the five days, July 6 to 10, 1903. You will infer from the enclosed folder that the exact time and place of the department meetings have not been announced.

On January 1 and 2, 1903, the Department Presidents met President Eliot in Boston and besides discussing matters of detail, received from him several instructions. Thus each Department will meet in two morning sessions, bringing them into unusual prominence. The full program of every Department will present but four (4) general topics, each of which is to be treated in two (2) papers of twenty (20) minutes and discussed in four (4) papers of seven (7) minutes each. General discussion will be invited after each topic has been treated as above indicated.

The topics for the Department of Special Education are :

1. The influence of the study of the unusual child upon the teaching of the usual.

2. Should the scope of the public school system be broadened to take in all children capable of education and, if so, how should this be done ?

3. How can the term "charitable" be justly applied to the education of any children ?

4. What do teachers need to know about sense defects and impediments ? Messages from specialists in medicine.

Each topic will be presented and discussed by strong speakers, and it is hoped that the meetings will be well attended. Assurances come from every quarter that the Boston Convention will be the largest in the history of the Association. Here

is a magnificent opportunity for bringing "persons engaged in the education of children requiring special means of instruction into contact and affiliation with teachers in general for the interchange of ideas for mutual benefit."

Very truly yours,

EDWARD E. ALLEN,

President, Department of Special Education, N. E. A.

SPECIAL ANNOUNCEMENT OF THE NATIONAL EDUCATIONAL ASSOCIATION.

The Forty-second Annual Convention of the NATIONAL EDUCATIONAL ASSOCIATION will be held in Boston, Mass., July 6-10, 1903.

The usual rate of one fare for the round trip, plus the \$2.00 membership fee, has been granted by the railway lines of the New England Passenger Association, and will doubtless be concurred in by all railway lines of the United States and Canada. Tickets will be extended for return until September 1st on the usual deposit plan.

The Local Convention Committee at Boston is now fully organized and has already formed extensive plans for the business and the entertainment of the Convention.

Edward R. Warren, of Boston, has been appointed Secretary and Chairman of the Local Executive Committee, and, with several assistants, will have entire charge of all local convention interests.

All sessions of the seventeen departments will be held in halls and churches in the immediate vicinity of Copley Square. The general sessions will be held in the large auditorium of the Massachusetts Mechanics Association.

No single hotel will be chosen as general headquarters, but the various states will establish their respective headquarters in the several hotels about Copley Square, thus insuring superior accommodations not only for headquarters rooms but for the members from each state who may desire excellent and reasonable hotel entertainment.

Unusual opportunities will be furnished members for visiting the various points of interest in and about Boston. To this end all sessions of the Convention will be held in forenoons and evenings only, leaving the afternoons free for recreation and excursions. These afternoon excursions will be under the direction of the Local Convention Committee and will be provided with a sufficient number of expert guides to secure the utmost profit as well as entertainment.

All department meetings will occur in the mornings and the general sessions in the evenings, thus bringing the department sessions into unusual prominence. In view of this arrangement a meeting of the Department Presidents was recently held in Boston for conference with President Eliot to arrange the most profitable programs for department meetings.

The railway and steamship lines terminal in Boston, give assurances of extensive and attractive excursions, following the convention, at low rates, to all the seacoast, island, mountain, and lake resorts of New England, and of eastern Canada, including Nova Scotia, New Brunswick, and Newfoundland.

Assurances come from every quarter that the Boston convention will be the largest in the history of the Association. No effort will be spared by the citizens of Boston, the Local Convention Committee, and the officers of the Association to make it also the best.

All active members are especially requested to co-operate with their respective state directors in organizing parties for the Boston Convention.

The Program-Bulletin will be issued earlier than usual, and will contain full details as to the railroad and hotel rates, local and after-convention excursions, rates of living at New England resorts, and full details as to the convention programs. Copies may be obtained after April 1st, on application to the undersigned.

Application for entertainment in Boston, or for other local information, should be addressed to Secretary, Edward R. Warren, Room 701, No. 60 State street, Boston, Mass.

IRWIN SHEPHERD, Secretary, N. E. A.,
Winona, Minn.

CALL FOR THE ANNUAL MEETING OF THE ASSOCIATION.

TO THE MEMBERS OF THE AMERICAN ASSOCIATION TO PROMOTE THE TEACHING OF SPEECH TO THE DEAF:

The thirteenth Annual Meeting of the American Association to Promote the Teaching of Speech to the Deaf will be held in Boston, Mass., at the Horace Mann School, No. 178 Newbury Street, on Saturday, the 11th of July, at 10 o'clock A. M.

The special business will be the election of three Directors to serve for three years in place of the retiring Directors whose terms expire in 1903, viz., Alexander Graham Bell, Mrs. Gardiner G. Hubbard, and A. L. E. Crouter.

The question of enlarging the Board of Directors will also come up for consideration, and the proposed amendments to the constitution offered at the last meeting of the Association, and published in *THE ASSOCIATION REVIEW*, Vol. IV, page 410, will come up for action.

The question of the advisability of establishing a summer school for the training of articulation teachers will also come up for discussion, and the Committee on the summer school will report to the Association at large. The subject of future meetings of the Association will be considered in connection with the project for the summer school.

It has been decided to hold the Annual Meeting in Boston, in order to afford the members the opportunity of attending the meetings of the National Educational Association, to be held in that city, July 6 to 10, 1903. In order to secure reduced railroad rates, members should be in Boston not later than the 7th of July. For information concerning the N. E. A., address Mr. Irwin Shepherd, Secretary, N. E. A., Winona, Minnesota.

The headquarters of the American Association to Promote the Teaching of Speech to the Deaf will be established at the Copley Square Hotel, where our Local Committee have made arrangements for the accommodation of members at reasonable rates, provided those who intend to take advantage of this arrangement will write at once to the hotel for reservations.

Through the courtesy of the authorities of the Horace Mann School, the school building—which is conveniently located—will be thrown open during the morning hours as a meeting place for the members of the Association.

For further particulars concerning local arrangements, address Miss Sarah Fuller, Chairman of the Local Committee, Horace Mann School, Boston, Mass.

Arrangements are being made for a banquet to be held in Boston on the evening of Friday, July 10th (the closing day of of the N. E. A.). A reasonable charge will be made to members who desire to attend, and prominent members of the N. E. A. will be invited as guests of the Association.

On the following morning, Saturday, July 11th, the Annual Business Meeting of the Association will be held as stated above. It has not been considered advisable on the present occasion to conduct a regularly organized Summer Meeting with sessions for the reading of papers, etc., as such proceedings would duplicate in some respects those of the Department of Special Education of the N. E. A. The Association desires to co-operate in every way with the Department of Special Education, and not be in any sense a rival to it.

(Signed) ALEXANDER GRAHAM BELL,
President of A. A. P. T. S. D.

Z. F. WESTERVELT,
Secretary,
School for the Deaf, Rochester, N. Y.

1331 Connecticut Avenue,
Washington, D. C.

EXHIBITS OF AMERICAN SCHOOLS FOR THE DEAF AND FOR THE BLIND AT THE UNI- VERSAL EXPOSITION, ST. LOUIS, 1904.

School work prepared by the deaf and the blind does not differ materially from that prepared by normal children. Visitors at an exposition notice the similarity of this work, but cannot conceive of the widely different processes by which it is produced; neither can they appreciate the disadvantages which handicap the deaf and the blind. It is not what these pupils are taught, but how they are taught, that most interests the public.

Model Schools.—The Exposition authorities have decided to provide accommodations for model schools for the deaf and for the blind, which will be maintained from June 1 until December 1, 1904. The Committee representing the Convention of American Instructors of the Deaf and the Committee representing the American Association of Instructors of the Blind will assist in organizing and managing these schools. It is the policy of these committees that all methods of instruction shall be fairly represented. They have adopted the following plans :

There will be two model schools, one for the deaf and the other for the blind. Thirty rooms or spaces (fifteen for each school) will be reserved in the Palace of Education. About twenty-two of these spaces (eleven for each school) will be occupied by classes. This will require the presence of at least ninety pupils and twenty-two teachers each day the schools are in operation. The total number of pupils present at any one time will not exceed 120. Each class will be conducted with the least number of pupils possible to illustrate the method involved, and will in no case exceed six pupils. Only classes will be accepted where the method used differs from the processes ordinarily followed in public school work.

Representation.—Any State may send two classes, one of the deaf and the other of the blind, for a period of one or two months. Eleven or more States may thus be represented at the same time. As the classes change every month or two, all States will have an opportunity of being represented. Some States have expressed a desire to represent more schools and others to send more classes or to occupy more time. As there are 40 schools for the blind and 123 for the deaf, there should be no difficulty in filling the time and the space. Arrangements can be made for institutions to send classes not listed in the diagram, provided applications are made in time.

Dormitory.—A convenient dormitory with playgrounds will be provided by the Exposition Company. Experienced matrons, supervisors, and attendants will be selected or approved by the committees. Every convenience and precaution possible will be employed for the safety and the comfort of the children. The teacher representing an institution will be responsible for his or

her pupils from the time they leave the dormitory for school until they return, when they will be placed under the care of experienced supervisors. If desirable a school may send a supervisor to take charge of its pupils outside of school hours and accompany them about the grounds.

Expenses.—Furniture for the dormitory will be made in the cabinet shops of institutions and loaned to the schools, unless otherwise provided. The products of the industrial classes will be sold as souvenirs to pay for the raw material used. The total expenses incurred by the committees for maintaining the schools and the dormitory for each week will be divided by the number of pupils present, and each State or institution will be charged in proportion to its representation. By these plans expenses will be reduced so that it will cost but little more to keep a class here than at the home school. Many institutions are willing to pay the entire cost from the institution's funds. Some State commissions in charge of the State appropriations for the Exposition will pay part and others will pay all of these expenses.

Class Work.—The model schools do not exclude the display of finished class work. The walls of each room or space will be lined with cases and wall cabinets for the display of articles similar to those being produced in that space. For example, the walls of the shoeshop will be filled with cases for the display of shoes made in different institutions. This affords an opportunity for suitable classification and avoids unnecessary and uninteresting duplications, which have always been a great waste of space to the company, of time to the visitors, and of money to the exhibitors.

The committees can have the cases and wall cabinets made more cheaply and with more uniformity than the individual schools. However, if an institution wishes to make its own cases, plans may be sent to the committees. The expense of installation and care of these exhibits will be met by the exhibitors.

The name of each State and school sending a class will be placed over the space occupied by that class. A list of States and institutions which are to fill the spaces will be displayed and also portraits of classes which have once occupied them. Arrangements are being made to have the printing class publish a book

containing a portrait of each class and an engraving of the school from which it came. This will be accompanied by interesting material concerning the deaf and the blind.

The model schools will be among the most instructive features of the Exposition. They will attract wide attention at home and abroad. No State, institution, or school can afford to be without representation in this united effort. What a State does for its deaf and its blind is an index to the character of its population, to its wealth and resources, and to the ability of its officials. Large sums of money are yearly spent for the education of the deaf and the blind, and the public have a right to know what is being done for them. The State is also entitled to the privilege of displaying its educational advantages. Above all the deaf and the blind will be benefited by a more just and accurate public sentiment.

Applications for participation should be made to the secretaries of the committees.

KEY TO THE PLAN OF EXHIBIT.

School for the Deaf:

- | | | |
|------|-----|---|
| Room | 1. | School for the deaf-blind. |
| " | 2. | Primary oral class. |
| " | 3. | Advanced oral class. |
| " | 4. | Object and action work. |
| " | 5. | Language and other primary methods. |
| " | 6. | College display. |
| " | 7. | Gallery of eminent instructors. (Models of schools, etc.) |
| " | 8. | Statistics, publications, etc.(Volta Bureau, etc.) |
| " | 9. | Shoeshop. |
| " | 10. | Art class. |
| " | 11. | Sewing or cooking class. |
| " | 12. | Tailor shop. |
| " | 13. | Sloyd class. |
| " | 14. | Carpenter-shop. |
| " | 15. | Printing office. |
| " | A. | Platform for recitations and songs in the sign language. |

School for the Blind:

- Room 16. School for the deaf-blind.
- “ 17. Writing class (using the Braille or New York point system).
- “ 18. Reading class.
- “ 19. Object work.
- “ 20. Language, geography, and other primary methods.
- “ 21. Display of high-school work.
- “ 22. Gallery of eminent instructors. (Models of schools, etc.)
- “ 23. Statistics, publications, etc.
- “ 24. Basket-making.
- “ 25. Weaving class.
- “ 26. Sewing or cooking class.
- “ 27. Music room.
- “ 28. Library, including printing display.
- “ 29. Bookbinding or upholstering.
- “ 30. Broom factory.
- “ B. Band platform.

Other industrial classes can be substituted for these, provided applications are made in time.

COMMITTEE REPRESENTING THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF.

Chairman, E. M. Gallaudet, President of Gallaudet College, Washington, D. C.

Vice-Chairman, N. B. McKee, Superintendent of the Missouri School for the Deaf, Fulton, Mo.

Secretary, A. E. Pope, Department of Education, Universal Exposition, St. Louis, Mo.

Treasurer, Henry C. Hammond, Superintendent of the Kansas School for the Deaf, Olathe, Kansas.

Miss Mary McCowen, Supervising Principal of the Chicago Public Day-Schools, Chicago, Ill.

Rev. James H. Cloud, Principal of Gallaudet School, St. Louis, Mo.

COMMITTEE REPRESENTING THE AMERICAN ASSOCIATION OF INSTRUCTORS OF THE BLIND.

Chairman and Treasurer, S. M. Green, Superintendent of the Missouri School for the Blind, St. Louis, Mo.

Secretary, J. N. Freeman, Superintendent of the Institution for the Education of the Blind, Jacksonville, Ill.

B. B. Huntoon, Superintendent of the Kentucky Institution for the Education of the Blind, Louisville, Ky.

M. Anagnos, Director of the Massachusetts School and Perkins Institute for the Blind, South Boston, Mass.

W. B. Wait, Superintendent of the New York Institution for the Blind, New York City.

E. E. Allen, Superintendent of the Pennsylvania Institution for the Instruction of the Blind, Overbrook, Pa.

A. J. Hutton, Superintendent of the Wisconsin School for the Blind, Janesville, Wis.

DAY SCHOOLS IN CALIFORNIA.

The California Legislature has passed a bill providing for the education of deaf children in the public schools, which declares that "the Board of Education of every city, or city and county, or board of school trustees of every school district of this state, containing five or more deaf children, or children who from deafness are unable to hear common conversation, between the ages of three and twenty-one years, must establish and maintain separate classes in the primary and grammar grades of the public schools, wherein such pupils shall be taught by the pure oral system of teaching the deaf."

Another act, providing for kindergarten instruction in the public schools, declares that "in cities or school districts in which separate classes have been or may hereafter be established, for the instruction of the deaf, children may be admitted to such classes at the age of three years."

Another act, relating to the apportionment of school funds, provides that in districts providing classes for the instruction of the deaf, an additional teacher shall be employed for each twelve deaf children, or fraction of such number.

An act governing the state census requires that the Census Marshal shall report the number of those who from deafness are unable to hear common conversation.

Mr. Reckweg to whose efforts the signature of the Governor is largely due, is a deaf gentleman of Los Angeles. He was born deaf and was educated in the school of Dr. Hirsch in Rotterdam. He came to this country about thirty years ago

and acquired the English language both in its written and spoken forms by his own exertions without special instruction. He speaks well and reads the lips very readily. He is now in Washington on his way to Rotterdam to participate in celebrating the 50th anniversary of Dr. Hirsch's school. He was an enthusiastic advocate of the oral method, and he was largely instrumental in founding the oral school in Los Angeles, and has now again been instrumental in gaining state aid for that and other oral day schools in California. He is accompanied by his daughter—a bright girl of 18—who hears and speaks.

CORRECTIONS.

We have been requested by the author to make the following corrections and emendations to the article on "A Visit to the Principal Italian Institutions for the Deaf," which appeared in the December, 1902, number of the REVIEW :

The title, page 455, should read "A Visit to *Some* of the Principal Italian Institutions for the Deaf."

On page 460, "Il lavors professionale" should read "Il lavoro professionale."

On page 460, "Professor Tornari" should be Professor Fornari.

On page 464, "Russian" should read Prussian.

On page 465, the beginning of the second paragraph should read : There is in Rome no separation between poorly and normally endowed children but at the beginning of 1903 the poorly endowed children will be gathered all into one class.

On page 466, in speaking of the work in drawing the name of the drawing master, Professor Cav. Luciano Castagna, should have been given.

On page 466, part of the paragraph near the bottom should read : Besides the Director, Dr. Monaci, who is a priest, three lady teachers and three helpers (*assistiente*), live in the institution which is a boarding institution, but they have nothing to do with the care of the household, which is in charge of a lady house-keeper.

On page 467, 30,000 lire should read 10,000 M., and the paragraph near the bottom, in its criticism of the lesson, should read : Although the teacher gave his lesson perfectly well, I did not like the dry, well known way in which the subject was treated. It was the same method I myself had employed formerly, and when I gave expression to my thoughts, Dr. Monaci caused another course to be taken : "Get me a glass of water, etc." The teacher knew well how to make this lesson interesting to the children.

On page 469, the second sentence of the second paragraph should be altered to read, at its close : I could not help expressing a feeling of shame, thinking how often I got impatient with my children during lessons.

To the list of schools for the deaf there should be added Miss F. L. Willhoyte's Private Day School for the Training in Speech for Deaf Children before they are of School Age, 46 Frankfort Street, Columbus, Ohio; founded, March 6th, 1902, by Mrs. G. W. Saltz with two pupils, a boy and a girl, one born deaf the other became so in infancy. The school is to serve as a nucleus for a Home similar to that established in Philadelphia by Miss Mary S. Garrett, where the present instructor, Miss Willhoyte, received her training.

Instruction for the Deaf.

A private school for pupils with defective hearing which is equipped and conducted on the same scale as the finest private schools of New York. Instruction is wholly oral. Preparation for any college or for business. Lip-reading taught to adults. Hearing developed by scientific treatment. While adults are received, it is greatly to the advantage of children to begin their study before reaching the age of six.

THE WRIGHT ORAL SCHOOL.

42 West 76th Street, New York.





DR. JOSEPH CLAYBAUGH GORDON.

THE ASSOCIATION REVIEW.

VOL. V, No. 3.

JUNE, 1903.

DR. JOSEPH CLAYBAUGH GORDON.

JOHN HITZ, SUPERINTENDENT OF THE VOLTA BUREAU,
WASHINGTON, D. C.

Among the names of the present generation, none assuredly are generally better known, and especially familiar to educators of the Deaf, than that of Dr. Gordon, late Superintendent of the Illinois Institution for the Education of the Deaf, at Jacksonville, who, in the midst of an ever widening career of usefulness, after a brief illness of three days, departed this life, April 12th, 1903.

Dr. Gordon was born at Piqua, Ohio, March 9th, 1842, and came to Illinois with his parents in 1850, settling first temporarily at Jacksonville, and then more permanently at Island Grove, midway on the road to Springfield, where his father, Rev. John M. Gordon, a Presbyterian Minister, established a colony of Scotch-Irish Presbyterians. Subsequently the elder Gordon aided in founding Monmouth College, whose main building owes largely its existence to his efforts. Here it was that Dr. Gordon graduated in 1866, and where in 1893 the honorary degree of Ph. D. was conferred on him. His first connection with the work of educating the deaf began at the Indiana Institution, under the superintendence of Thomas MacIntyre, where he entered in the year 1869 as special teacher of "articulation and reading the lips," as authorized by the Board of Trustees in the year previous. In 1873 he entered the College Faculty of the Columbia Institution for the Deaf, having been appointed to the professorship of mathematics and chemistry, where in 1891 he

also assumed charge of the "Department of Articulation, and the Normal Department of Gallaudet College," the former having been authorized under Act of Congress, appropriating "the sum of \$3,000 for the expense of instructors of Articulation." After having served the National institution at Washington, under President E. M. Gallaudet, for nearly a quarter of a century, he assumed, July 1st, 1897, charge of the Illinois State Institution, then the largest of existing schools for the deaf, of which he continuously served most acceptably as Superintendent up to the time of his death. Having, from the commencement of his career as instructor of the deaf, taken special interest in the teaching of speech, as Superintendent he here greatly extended the scope of this instruction, constantly, by indefatigable energy, bringing an increased number of pupils under its influence. The process by which he effected this he designated as "the intuitive method, because in all departments language is taught directly without the intervention of artificial signs between the idea and the word." The faithful adherence to his convictions aimed upon closely following the mandates of his associates in the profession, and the effects which resulted from this course in the institution over which he presided are forcibly set forth in the following extract from his last report, rendered July 1st, 1902.

"It is worthy of note that the English language in its written and spoken forms is becoming more and more the language of our school rooms. The more faithfully and intelligently the methods approved by the superintendent are practiced in the class rooms, the better are the educational results in every way.

"In the application of improved methods of instruction, which have stood the test of time, the instruction in speech and the actual use of speech in daily lessons and school-room work have gradually affected larger and larger numbers of pupils. A careful study of the facts behind the figures in our tests and examinations should remove all doubts as to the correctness of the course we follow. Our course of action has not been determined by the inclination of the superintendent, nor does it rest upon his personal unsupported judgment.

"The policy of this school, especially in the matter of speech teaching, has been prescribed for it by the unanimous votes of the convention of American Instructors of the Deaf, and the Con-

ference of Principals of American Schools for the Deaf, the only bodies which have spoken, or can speak, for the entire profession in America. The resolution adopted at the 11th convention of American Instructors of the Deaf, in session at Berkeley, California, in 1886, and reaffirmed by the 14th convention, which was held in Flint, Michigan, in 1895, at which time it was incorporated in the constitution of the convention, reads as follows :

“*Resolved* : That earnest and persistent endeavors should be made in every school for the deaf to teach every pupil to speak and read from the lips, and that such efforts should be abandoned only when it is plainly evident that the measure of success attained does not justify the necessary amount of labor.’

“In accordance with this advice, it is the practice of the Illinois school to give every pupil a long continued and fair trial under expert teachers of speech.

“The other resolution governing the practice of this school was adopted by an unanimous vote at the Seventh Conference of Superintendents and Principals of American Schools, which met at Colorado Springs, August 8-11, 1892. This action was as follows:

“*Resolved* : That it is the sense of this conference that in all schools for the deaf pupils who are able to articulate fluently and intelligently should recite orally in their classes, and be encouraged to use their vocal organs on every possible occasion.’

“In compliance with this advice, we afford the opportunity to pupils who can recite their daily lessons by word of mouth to do so.

“The practical effect of the application of the two resolutions in this school is shown by the growth of the oral department, as shown in Table XVIII.

TABLE XVIII.

“Number of pupils in the Oral and Silent Departments, respectively, of the Illinois School for the Deaf, for ten years ending June 30, 1902.¹

	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902
Silent Department	492	408	429	413	383	316	273	250	207	160
Oral Department	0	67	68	80	138	215	260	296	341	398
Total	492	475	497	493	521	531	533	546	548	558

¹ Pp 30—31—Thirty-first Biennial Report of the Trustees, Superintendent and Treasurers of the Illinois Institution for the Education of the Deaf and Dumb.

Dr. Gordon was wedded to no mere theory, he was eminently practical, and hence was deservedly recognized as a high authority by educators generally upon all educational matters appertaining to the deaf. Whatever intelligent practice commended, and wise experience approved, he utilized to promote the physical, mental and spiritual welfare of his pupils in the kindergarten, preparing for college, and in chapel exercises. Physical training, technical skill, mental and ethical culture, in his broad, comprehensive and practical ideas of a genuine education, to the extent that circumstances would admit, all received due attention. Whatever he felt convinced was best and right—that was to him a duty inviolably to be followed, and to its accomplishment he devoted with judicious fearlessness his entire energies. Whatever position he assumed would clearly be defined—standing forth in bold relief if necessary, yet uniformly presented with becoming courtesy and dignity to whilom opponents, who never failed to respect this inborn manliness.

At conventions of educators of every phase, Dr. Gordon, when present, constituted a prominent figure. His immediate professional associates constantly sought his valuable and ever ready service in some form, either as essayist, to participate in discussions, serve on important committees, or as an executive officer of some kind. We find him already at Indianapolis in 1870 serving the seventh convention of American Instructors of the Deaf, first as temporary, and then as permanent secretary, with Dr. E. A. Fay as associate. In 1874 he contributed to the *Annals* an abridged article from the Italian, entitled “The Education of the Deaf-Mute by Means of Articulation,” followed in 1876 by reviews of P. Fornari’s works, “The Speaking Deaf-Mute,” “Key to Speech for Italian Deaf-Mutes,” issued in 1872, and of Moritz Hill’s work, entitled: “First Book for the Instruction of Deaf-Mutes in Language,” (issued in Italy by P. Fornari, 1873.) In 1882 he contributed to the *Annals*, “Biographical Sketch of Horace Gillett,” and at Jacksonville, at the tenth meeting of the Convention of American Instructors of the Deaf, we find him enrolled a member, and participating in debates, noticeable emphasizing the importance of using the manual alphabet; commending the publication, entitled “The Raindrop” as being

most admirably adapted for reading matter for deaf-mutes ; necrological tribute to Horace Smith Gillett, etc., etc. In 1884 we find in the *Annals* "Remarks on Auricular Instruction," giving a brief history of the same from the earliest inception, (1779), and "Picture Games as an Aid to Teaching" read during the meeting of the third Convention of Articulation Teachers of the Deaf, where we find him also offering a resolution, which was favorably acted upon, requesting the Convention of American Instructors of the Deaf and Dumb to organize a section of the Convention for the promotion of articulation teaching. Subsequently as member of a committee appointed by this convention "to make investigation of the subject of tests of hearing, together with the best of the methods of the treatment and cultivation of latent aural power," he reported the result of its conclusion, December, 1884. (See *Annals*, Vol. XXX.) During the same year, Dr. Gordon presented an exhaustive paper on "Historical Experiments in Associated Education" before the meeting of the American Association for the Advancement of Science, held in Philadelphia, in September, which, in substance, he had delivered at the special meeting of the National Educational Association, President T. W. Bicknel presiding, held in the State Senate Chamber, Madison, Wisconsin, July 16th, to consider the subject of "Deaf-Mute Instruction in Relation to the Work of the Public Schools." In the December following appeared also the report of "a committee on the hearing of the Deaf." In 1885 appeared a review in the *Annals* of the Janet Byrne's booklet, entitled, "Picture Teaching for Young and Old," likewise, "Hints to Parents of Young Deaf Children, Concerning Preliminary Home Training," a paper prepared from the notes of an informal lecture to the "Parents' Class," at Dr. Bell's Private Experimental School in Washington, D. C. In 1886 appeared a sketch of Dr. MacIntyre's connection with conventions of instructors, also "Notes on Manual Spelling," illustrated by specially prepared front view cuts of the one hand alphabet, drawn and engraved from photographs made under the personal supervision of Dr. Gordon, and esteemed a model of perfection. In the year 1886 also appeared a paper concerning Deaf-Mutes in the United States, prepared at the instance of the British Government, and

“presented to the House of Commons, by command of Her Majesty, in pursuance of their address dated August 13, 1885,” under miscellaneous documents, No. 1, of which the officer of the British Legation in transmitting the same states: “Enclosed herewith is an able and elaborate memorandum drawn by Professor Gordon of the Columbia Institution, dealing particularly with the organization of the various institutions for deaf-mutes, with the systems of education followed, with the occupations and trades of deaf-mutes, and with questions of heredity.” In 1889 appeared in the *Annals* an able review of the comprehensive work of Ludovic Guguillot, entitled: “How to Make Deaf-Mutes Speak,” preceded by a preface of Dr. Lacharriere, and in 1890, a review of the reports by Marius Dupont of the National Institution in Paris, on auricular instruction.

In 1891 we find Dr. Gordon, who already in 1884 was enrolled an active member of the Convention of Articulation Teachers of the Deaf, “also enrolled in its legitimate successor,” The American Association to Promote the Teaching of Speech to the Deaf, organized August, 1890, during the progress of the Twelfth Convention of American Instructors of the Deaf, taking an interested and active part in its instructive sessions.

In 1892 appeared the voluminous work issued by the Volta Bureau, “to signalize an educational movement of international interest,” entitled: “Education of Deaf Children: Evidence of Edward Miner Gallaudet, and Alexander Graham Bell, presented to the Royal Commission of the United Kingdom, on the condition of the Blind, the Deaf and Dumb, with accompanying papers, postscripts and an index, edited by Joseph C. Gordon, then professor of mathematics, etc., in the National College for the Deaf, Washington, D. C.” This comprehensive and valuable work having been issued solely for distribution to the more important institution and reference libraries, was followed in the same year by “Notes and Observations upon the Education of the Deaf, with a revised index to Education of Deaf Children,” a lesser work intended for readers in general, nevertheless containing valuable treatise not embraced in the larger volume, including among other matters, brief notes in regard to the progress of speech-teaching, several international and other con-

ventions, statistics of employments in which the educated deaf in the United States, Italy and Prussia were engaged, and a complete list of the libraries and institutions where the larger work, "Education of Deaf Children," could be consulted.

During the same year we find Dr. Gordon participating in the conference of superintendents and principals held at Colorado Springs ; in the *Annals*, contributing a review of the "Lyon Phonetic Manual," and an interesting paper entitled : "The New Departure at Kendall Green," consisting in " First, an extension of the College course of study, to include instruction and practice in speech and speech reading ; and second, the introduction into College life, in intimate association with deaf undergraduates, of a small number of highly recommended and carefully selected hearing students for a postgraduate course of study and training of one year, preliminary to becoming teachers in schools for the deaf." The following year (1893), he submitted to the World's Congress of Instructors of the Deaf, convened at Chicago, an interesting chart and statistical paper entitled, "Oral Work in Schools Using the Combined System." An article entitled, "Recent Progress in Aural Surgery" appeared in the *Annals* in 1894, and in the same year at Chautauqua he assisted as secretary in organizing "The Association to Promote Auricular Training"—where and when he also delivered an illustrated and highly instructive lecture before the fourth Summer Meeting of the American Association to Promote the Teaching of Speech to the Deaf, entitled : "Progress in the Amelioration of Certain Forms of Deafness and Impaired Hearing." In 1895 Dr. Gordon actively participated in the proceedings of the Fourteenth Convention of the American Instructors of the Deaf, held at Flint, Michigan, as a member of the committee on order of business, as chairman of the Oral Section, delivering the Opening Address replete with instruction, and conducting with habitual ability its proceedings, in like manner as chairman of the Auricular Section delivering the Opening Address, and Conducting its proceedings. During the convention he likewise delivered a brief address "On Higher Education of the Deaf," and otherwise enhanced the interest of its proceedings. At the Fifth Summer Meeting of the American Association to Promote the Teaching

of Speech to the Deaf, held at Mt. Airy, 1896, Dr. Gordon responded to the address of welcome, and as representative of the Volta Bureau, read its reports from European schools, and participated in discussions. Governor John R. Tanner having tendered him the Superintendency of the Illinois State Institution at Jacksonville, he accepted the same after some hesitation, and assumed charge, July 1st, 1897. Immediately following, at the Thirty-sixth Annual Meeting of the National Educational Association in Milwaukee, Dr. Gordon, as chairman of the Round Table, organized among members specially interested in the education of the deaf, "made appropriate comprehensive introductory remarks, full of interest and valuable to all educators present," and likewise submitted a petition signed by Alexander Graham Bell, Director of the American Association to Promote the Teaching of Speech to the Deaf, and forty-five others, for the establishment of a new department to be named the "Department for the Education of Classes Requiring Special Methods of Instruction," which, on motion of Director N. M. Butler, was allowed after substituting for the above name that of "Department for the Education of the Deaf, Blind and Feeble-Minded," of which, in the course of the session, Dr. Gordon was elected first president for 1897-98, and actively participated in its largely attended and interesting proceedings. As president of the new department, number sixteen, Dr. Gordon issued his "Bulletin No. I," in which he preliminarily stated :

"The object of our Department is two fold ; first to bring our work as educators of the Deaf more prominently before educators in general, bringing them into sympathy with this work, and second, to bring ourselves more closely into touch with the best educational thought of the day, and into better acquaintance with its representatives." * * * * *

Among the papers elicited by a letter addressed, June 1st, 1897, to the Superintendent of the Volta Bureau requesting information as to whether "any established or commonly agreed upon system of international nomenclature for descriptive purposes existed, was a response embodying a simplified classification of the methods of instruction, followed during the succeeding year by a paper prepared by Dr. Gordon showing "the difference between the two systems of teaching deaf-mute chil-

dren the English language," issued as a "supplement elucidating circular of information, No. 4."

Dr. Gordon's "first statement," or report, covering the business transactions of the Illinois Institution for the biennial period ending June 30, 1898, displayed such thorough pedagogical knowledge, administrative ability and comprehensive scope of treatment, that, in the estimation of educators generally both in his own country and abroad, he at once took high rank as eminently fitted to preside over the largest existing school for the deaf. In this report, Dr. Gordon, among other things, recommended that steps be taken to drop the words "and dumb," and substitute "school" for the word institution, and so modify its legal title as to read "Illinois State School for the Deaf," which change eventually the legislature duly enacted.

At the meeting in Washington City, July 7-12, 1898, of the National Educational Association, Dr. Gordon, as presiding officer of Department Sixteen, delivered the opening address, most acceptably conducted the highly interesting and largely attended proceedings, exercised general supervision of the exercises, and elaborate exhibits, and at the Fifteenth convention of the American Instructors of the Deaf, held July 28 to August 2, following, we find him chairman of the Oral Section, participating actively in discussions on various topics, tendering brief responses to queries, etc. etc. At the Sixth Summer meeting of the American Association to Promote the Teaching of Speech to the Deaf, held at the Clarke School, Northampton, Mass., June 22-28, we find Dr. Gordon offering an important resolution instituting a committee to confer with the Director of the United States Census, so as "to secure under the existing law, if possible," a proper enumeration of the blind and the deaf. On this committee, which eventually achieved the object for which it was appointed, served, with Dr. A. G. Bell as president, also Drs. J. C. Gordon, A. L. E. Crouter, Hon. Edmund Lyon, and Mr. F. W. Booth. Early in 1900 appeared interesting "Tabulations Relating to the Instruction of the Deaf, for 1899, prepared for the Educational Congress in Paris, compiled from statistics found in the American Annals, the Association Review, and other sources, by J. C. Gordon, Superintendent of the Illinois School

for the Deaf," issued by the Institution Press. July 11th, 1900, Dr. Gordon delivered in Charleston, S. C., the opening address of the sessions of Department Sixteen of the National Educational Association, "discussed briefly the progress which is being made in the education of the Deaf," etc., and presided at the business sessions of the department. At the Sixteenth Meeting of the Convention of American Instructors of the Deaf, held at Buffalo, N. Y., July 2-8, 1901, Dr. Gordon displayed exceptional activity as Chairman of the Oral Section, and in regard to Kindergartens, technical training, trades union relations, domestic science, etc., showed keen insight and familiarity with the subjects under discussion, indicated furthermore where to obtain desirable instructors, and finally delivered obituaries of John H. Brown and Thomas Officer. In the meeting of Department Sixteen of the National Educational Association at Detroit immediately following, (July 11th), Dr. Gordon responded to Superintendent Martindale's address of welcome, reviewing the five years previous: served on several committees, and for the November Annals, prepared a thoughtful and comprehensive obituary of the late Superintendent Philip Goode Gillett, embodying the memorial resolution of the Board of Trustees, and instructors of the Deaf of the Illinois Institution. During the year also appeared a reprint from the New Era of March 23rd, succinctly giving an account of the "progress in deaf-mute instruction in the United States," which found its way to every known region of the earth.

At the Annual Meeting of the Board of Directors of the American Association to Promote the Teaching of Speech to the Deaf, held at Washington, D. C., December 28, 1901, Dr. J. C. Gordon, was duly elected a member of the Board, to fill the unexpired term of the late Dr. Philip G. Gillett, and assigned to the special committee of arrangements for the next Summer Meeting. At the following annual meeting, June 11th, 1902, Dr. Gordon was re-elected to fill the full term of three years.

At the meeting of the National Educational Association in Minneapolis, July 9, 1902, the resolution offered by Dr. J. C. Gordon, chairman of committee on resolutions, that Department Sixteen be styled "Department of Special Education, relating

to children demanding special means of instruction," was favorably acted upon and adopted. His exhaustive report for the two years ending June 30, 1902, was replete with pedagogical observations of importance and instructive statistical tables, clearly established his masterly skill in managing so large and diversified an institution, and constitutes of itself a crowning monument to the full measure of the man upon whom devolved so great a trust as that accorded by the great State of Illinois to Joseph C. Gordon.

His wide scope of knowledge, administrative ability, and ever ready spirit to utilize these in behalf of individual and organized effort to serve fellow men, rendered him not only in educational and philanthropic lines an important and desirable factor, but likewise in many other phases of social and civic duties. Among others, the Volta Bureau, in which he took a deep and active interest from the period of its inception, and which he has served as representative on various occasions, is largely indebted to his ever ready counsel and far-sighted suggestions in successfully formulating a course of action calculated eventually to constitute it the World's great Exchange of upon all matters appertaining to the cause it has been established to serve and to promote

Dr. Gordon was married in 1878 to Miss Anna Sibyl Wadsworth of Cincinnati, Ohio, who with three children, George, a graduate of Princeton, now completing his law studies at Harvard; Grace, a senior at Smith College, and Sibyl, attending school in Jacksonville, survive him. He leaves also two brothers, Rev. George J. Gordon, of Hebron, Indiana; John R. Gordon, of Pueblo, Colorado, and three sisters; Mrs. Cowan, wife of Rev. James P. Cowan, of Indianapolis, Indiana; Mrs. James Nevin, of Pittsburg, Penna.; and Mrs. Dr. Coulson, of Boulder, Colorado. He was a devoted husband and most exemplary father; an active member of the Presbyterian Church, who taught in its Sunday School; yet a man of broad religious views, and generous impulses for fellowmen. He was a member also of the Literary Union, and of the Sons of the American Revolution.

That he was the full measure of a man, I will in evidence cite some of the tributes paid his memory by professional

associates and friends: "Dr. Gordon had genial manners, and an attractive personality. He made friends readily, and his friendships were usually strong and lasting. He was a clear thinker, a ready writer, a forcible speaker, a successful teacher, an efficient superintendent, a public spirited citizen; a true disciple of the Master, always ready to deny himself for the sake of others. His death leaves a vacant place in the profession, and in the community that cannot easily be filled." Another says: "He stood in the front rank as a thinker on educational subjects among his associates engaged in the instruction of the Deaf. His mind was turned especially in the direction of the natural sciences, and he was not only thoroughly well informed on these subjects, but was capable of original research, and he made distinct contributions in some lines suggested by his work among the deaf; withal a man of distinguished appearance, of agreeable manners and extremely interesting in conversation, a high minded gentleman and a Christian." Another says: "He will be remembered as a scholarly and able representative of the profession of teaching the deaf. But more than this, by the hundreds of students at college, and others who have come directly under the influence of his personality, he will be remembered as a sympathetic friend, and an earnest teacher, ever ready to assist the deserving, and encourage those who were ready to give up. Many an offending student will recall his standing kindly between him and the stern discipline of the faculty in the effort to avert his suffering penalty." Another says: "He had a faculty for statistics and technical knowledge, such as was perhaps not equalled by that of any other man in the profession; this, together with his incisive mind and his capacity for grasping and retaining a vast fund of general knowledge, made him an authority respected by all. Perhaps no man living was better informed upon matters pertaining to the deaf. Notwithstanding his ability to speak with authority upon many subjects, he was a modest man, never obtruded his views unpleasantly upon others, and withal possessed a kind heart and genial disposition." A former collegiate pupil says among other things: "He was such a consummate master of the particular branches of science which he taught, that he allowed every student the greatest freedom of thought. In the

class room he never dampened the ardor of a student who went wrong. It was indeed a great pleasure to sit at his feet and learn. Being more a leader than a follower. Dr. Gordon stood in the very front ranks as an educator." "A deep thinker, an erudite scholar, earnest, courageous and kind, a man of engaging manners, a delightful companion and a steadfast friend. He lived a conscientious, clean and honest life." "A discerning and discriminating judgment and great capacity for work." "Of his mental attainments and philanthropic spirit it were useless to speak, they are known to all men in the profession." "Whatever he undertook to it he devoted all his energies." Editorially it is written of him : "In the death of Dr. Gordon the cause of the deaf loses a most zealous friend, the State a most efficient and faithful public servant, the educational world a brilliant scholar, and teacher, and the community at large, a high-minded, noble hearted, public spirited citizen." "He was keen, alert, progressive, and kept in close touch with all the latest and best for the advancement of the unfortunate children to whose education he had devoted his life. In addition to renowned ability as an instructor, he was a bright business man, and the management of the institution under him has been above criticism. According to the opinion of everyone he was 'the right man in the right place.'"

"The Rev. A. B. Morey, who delivered the funeral discourse, paid to the departed, the following tribute : 'There was a man sent from God, whose name was John. This is true of every man, whatever his name. Everyone is sent of God into this world to do a certain work, and live a certain life. That was Dr. Gordon's idea of life. To him life was a mission, a heaven-sent mission, and not a mere purposeless existence with no divine plan behind it. And as a proof, his looking upon things of this world not as an end in themselves, but as a means of helping him to do the work and duty which his God-sent life involved. That gave earnestness to everything he did. He knew that the man was sent from God. He knew it and realized it and acted upon it. Men have different ways of looking at themselves, but whoever omits God from his place, degrades life into a mere physical existence. On the other hand, whoever realizes it is God that worketh in him to will and to do lifts life up into the light of heaven. Our greatest power is on the religious side of our Nature. Physically we are crushed before a breath of wind,

but religiously we have omnipotence as the science of our strength." * * * * Dr. Gordon's simple, loving faith, his broad Catholic spirit, his unswerving integrity, his upright and transparent life are known to us all. He had that valuable, perhaps most valuable of intellectual possessions—judgment, sound sense and discretion which made him a wise counsellor and a safe adviser. A true friend, a faithful officer, a noble man, a childlike Christian, the kindest of fathers, the tenderest of husbands.' "

The floral tributes at the funeral were numerous and elaborate, and the cortege, following the remains from the institution where the final services were held, to the railroad station to be conveyed to Monmouth for interment, was one of the largest ever witnessed in Jacksonville. Governor Richard Yates and his staff, besides other notable officials, attended in a body, and among the active and honorary pall bearers present, were Dr. A. Graham Bell of Washington, D. C.; Trustees, T. M. King, and W. W. Watson; Judges E. P. Kirby and Charles A. Barnes; Superintendent H. C. Hammond of Olathe, Kansas; Superintendent N. B. McKee of Fulton, Missouri; Prof. Frank H. Hall; Acting Superintendent C. P. Gillett, and others. The teachers of the institution assembled and tendered their sympathies to the family by resolution closing with the words: "We rejoice in their rich heritage of the example of a noble life, which at the last was laid down with a simple courage that was beautiful. He said: 'All is well,' and for him it was a glorious Easter Day."

Among other manifestations of sympathy and deep regard appeared the following tribute from his former colleagues of Gallaudet College:

"At a meeting of the Faculty of Gallaudet College, held on April 14th, 1903, it was voted to spread the following minute upon the records, and to transmit a copy of the same to the family of our late colleague, Dr. Gordon, and to furnish one to the editors of the college magazine for publication:

"The Faculty of Gallaudet College desire by this minute to express their high appreciation of the character and services of their former associate, Dr. Joseph Claybaugh Gordon, who died April 12th, 1903.

"His successful work in the Indiana Institution as a young teacher; in Gallaudet College, as Professor of Mathematics and Chemistry for twenty-four years, and Professor-in-charge of the Department of Articulation, and the Normal Department for

four years; and in the Illinois Institution as Superintendent for six years ; and his many valuable contributions by pen and voice to promote the education of the deaf, gave him an eminent place in our profession ; his strong public spirit, earnest patriotism and deep religious feeling made him an excellent citizen, while his amiable disposition, genial manners and warm-hearted friendship won our esteem and affection. We mourn his death ; we cherish his memory ; we offer his wife and children in this their great bereavement, our sincere and respectful sympathy."

Verily to no one more than to our departed friend are applicable the assuring words of Scripture :

"Well done, thou good and faithful servant; thou hast been faithful over a few things, I will make thee ruler over many things; enter thou into the joy of thy Lord."



JAMES: AN UNUSUAL PUPIL.

MARY S. BRECKINRIDGE, DANVILLE, KENTUCKY.

There is a boy in our school who deviates much from the rest of our pupils. He is rather small for his ten years, with a closely knit frame, slow in movement, and with deep set eyes. His habitual expression is one of stolidity—half indifference and half incomprehension, though at times his eyes brighten, his whole face becomes animated, and one feels that speech is just on the tip of his tongue. But that is his peculiarity—that he cannot talk.

His hearing is practically perfect. He can hear a whisper, and prove that he hears it by obeying any simple command, and by repeating words and short sentences.

Up to the time he came to school he had never talked, and his mother sent him here hoping he could be taught to speak.

When he entered school two years ago last September, he was put in the class of another teacher. She told me that during his six months with her she never heard him speak any word but "Mama," and that was only a few times when he was crying with an attack of homesickness.

The latter part of his first year in school he was transferred to my class. I think the only word I heard him speak voluntarily during his first three months with me was "Home." That was one day while he was standing in the corner as a punishment for having teased a classmate.

He, plainly, does not derive the pleasure from speech that the deaf children do. He does not *want* to talk. I can not hear of any other child of like mental make up, nor have I been able to get any practical help or suggestions in regard to the best methods of teaching him; so, for want of better knowledge, I have given him the same language work I have given the deaf children, and have talked to him as much as possible.

From his entrance to school he was drilled on the elementary sounds, and learned to read them from the printed chart and from script, though his voice is weak.

His progress in school has been that of the class, and no more in spite of his hearing, for he has little ability to remember words.

Last year, his second in school, I tried to make him ask for candy. The rest of the class would say "I want some candy." James would repeat each word after me, but not for many days could I persuade him to attempt the sentence alone, and it was only by depriving him of his share of the candy until he asked for it that he could be induced to speak.

He has always been a quiet child, willing to sit still and averse to any physical effort. I hear that he sometimes plays with the other boys on the play ground but I have never seen him at any active sport. He prefers to loaf rather than share in the games.

He could not write when he came to school. The first year he learned to write twenty or thirty words but in an almost illegible hand. His writing is still restricted, but now he has several hundred words at command, which he can write, if not gracefully, at least readably.

He knows the meaning of, and can speak aloud any word he has written, but when the opportunity comes to use the words in sentences he is utterly at a loss, apparently being unable to combine the words to express his idea.

He can, however, take a piece of paper and write on it a journal, with correct date, of from eight to twelve sentences. He has never written more than three sentences on any one topic.

He can speak the answers to such questions as these:—What is your name? Where do you live? Do you love me? Are you well? Did you fall? Do you like peanuts? How many shoes have you? Where is the knife? Etc.

To give an illustration of the mental peculiarity : One day last year I told him to put the slates in the closet. Some other child had heedlessly put the books where the slates belonged. James stood with a half dozen slates in his hands, gazing in-

dignantly at the books, and he stood there for many minutes, till the books were moved.

One morning less than a month ago, he studied a journal of ten sentences which I wanted him to memorize and recite. He spoke four sentences with only a little help. In the fifth sentence he came to the word "was" and stopped. I opened my watch and waited patiently for fifteen minutes, James standing by my side, and occasionally looking at the word. At the end of the fifteen minutes I pointed to the word and asked in my sternest tones, "What is that, James?" He said slowly, "Was."

Why did he not say it sooner? I am sure I do not know. That is a typical case, his saying a dozen longer words and then stopping at a short one. Usually I do not wait more than a fraction of a minute before I make him give the elements of the word, and then I say the word and make him repeat it after me.

His home is in Henderson, and last year he learned to direct to his mother the letters he writes her each week. Though he could write Henderson easily he always had trouble in saying it. He said "Hen-son-der" until one day recently when I worked with him about fifteen minutes and made him repeat the word many times. Now he can speak it quickly and well.

His mother went to Chicago last autumn to spend the winter. For several weeks James brought me the envelopes to address. One day I wrote the address on it and laid the letter aside. James picked it up and pointed to the lower left hand corner, where I had forgotten to write "Second Floor Front." That is as typical of his memory for facts as the other instances are typical of his inability to remember spoken words.

Of late there have been few days when he has not come to me to tell me something that has happened, which he seldom did last year. He tells the interesting point in gestures or signs usually prefixed by a word and sometimes interspersed with a few other words.

Sometimes he makes a sign for a word and speaks what he intends to be the same word but it turns out to be something quite different. He knows as soon as he has said it that he has used the wrong word. I think that is one reason that he does not talk more, because he knows he will fail to satisfy his own critical faculty.

FORMATION AND DEVELOPMENT OF ELEMENTARY ENGLISH SOUNDS.

CAROLINE A. YALE, NORTHAMPTON, MASS.

VI.

VOWELS—BACK SCALE.¹

OO. (LONG)

Chart spellings : oo, (r)¹u-e, (r)ew.

Formation—Back of the tongue raised high, with lips closely rounded by side muscles as for *wh*. Prof. Bell says in regard to the lips, “The corners of the lips should meet, and their central edges approximate, *without projection*.”

Mr. D. Greene in his “Manual of Articulation Teaching” says of this sound : “When the lips are rounded, they must, of course, be protruded at the same time ; the tongue is drawn back in the mouth and its back part is raised. But as all this is the natural and inevitable result of the rounding of the lips, it is best to let well enough alone and not trouble the pupil by calling his attention to it.” Guttman says that this sound has “Lowest position of the larynx ; back of the tongue slightly arched ; lips thrust forward so as to form a narrow, nearly circular opening.”

Quantity: Long.

Example: food, rule, brew.

¹Professor Bell says, “Every lingual vowel may be rounded, but the ‘back’-vowels furnish the only English elements of this class.

....The degree of labial contraction corresponds with the aperture of the lingual vowel as modified by the high, mid, or low position of the tongue. Thus ‘high’ vowels are rounded by a *close* position of the lips ; ‘mid’ vowels by an *intermediate* position ; and the ‘low’ vowels by a *broad* labial aperture ; as in : oo (close), oh, (middle), aw (broad).”

Method of Development—I. Imitation. II. Contrast with *aw*. III. With the lips in position for ¹*oo* let the combination ¹*koo* be repeated several times while the pupil's hand is held on the teacher's throat.

OO. (SHORT)

Chart spelling: ²*oo*.

Formation:—The ¹tongue and lips are in nearly the same position as for *oo*, but the aperture is slightly more open.

Quantity: Short.

Example: book.

Method of Development—Shorten ¹*oo*.

O. (LONG)

Chart spellings: o-e, oa, ————²o, ow.

Formation—The first or radical part of this sound is produced by a position slightly wider than for *oo short*. The second part, which is a glide or vanish, is *oo long*.

Quantity: This vowel is diphthongal, the first part being long and the second short.

Example: stone, boat, potato, ²*snow*.

Method of Development—By contrast with ¹*ow* (ow as in *cow*).

AW.

Chart spellings: aw, au, o(r).

Formation—The back of the tongue a little lower than for the radical part of the preceding vowel; the lip aperture being greater; with its vertical diameter longest.

Quantity: Long.

Example: saw, haul, for.

Method of Development—I. Contrast with *ah*. II. From the radical part of *ō* by widening the aperture slightly.

O. (SHORT)

Chart spelling: -o-.

Formation—The tongue slightly lower than for the preceding sound. Lip aperture less rounded. This is the lowest back vowel.

Quantity : Short.

Example : not.

Method of Development—Shorten the preceding sound.

AH.

Chart spelling : a(r).

Formation—The tongue should be soft and flat on the floor of the mouth, the point just touching the lower teeth. The teeth should be separated about a finger's width.

Quantity : Long.

Example : arm.

Method of Development—Imitation.

Note—As this vowel is, frequently, the one first taught, too great care can hardly be given to the quality of the voice secured and the unstrained, natural use of the vocal organs. Seldom should any other vowel be attempted until this one is given in a satisfactory manner.

U. (SHORT)

Chart spellings : -u-, ———a, ———a(r), ———o(r), ———e(r), ———i(r).

Formation—General position the same as for a(r), but the back of the tongue is a little higher.

Quantity : Short.

Example : cup, china, collar, color, baker, their.

Method of Development—Shorten the preceding sound.

I. (LONG)

Chart spellings : i-e, igh, —y.

Formation—The first or radical part of this vowel is Italian a or ah, the second part is a glide or vanish to long e.

Quantity : This vowel is diphthongal, the first part being long and the second short.

Example : side, night, by.

Method of Development—I. Combination of the two parts.

II. By contract with ā.

OU.

Chart spellings : ou² ow.

Formation—The first or radical part of this vowel is the same as for long a (r), the second part is a glide to oo².

Quantity : The first part of this diphthong is long, the second is short.

Example : proud, cow.

Method of Development—I. Combination of the two elements. II. By contrast with ō.

OI.

Chart spellings : oi, oy.

Formation—The radical part of this vowel is *aw*, the glide is short *i*.

Quantity : The long radical part is followed by the short glide.

Example—oil, boy.

Method of Development—Combination of the two elements.

U. (LONG)

Chart spellings : u-e, ew.

Formation—This sound is composed of ē and oo¹.

Quantity : The first element in this diphthongal sound is short, the second is long.

Example : use, few.

Method of Development—I. Combination of the two elements, taking care that their relative lengths be regarded. II. First take position for ē or ĭ, draw the tongue back forcibly to *ur* and round the lips.

U(R).

Chart spellings : ur, er, ir.

Formation—The whole tongue should be low and flat in the mouth. The teeth should be but slightly parted.

Quantity : Long.

Example : fur, her, sir.

Method of Development—From *a(r)*. Retain the same tongue position but nearly close the teeth.

ORDER OF TEACHING ELEMENTARY SOUNDS.

The order which it is advisable to follow in teaching the elementary sounds is one of expediency simply. It would, no doubt, be possible to teach them in the order of their natural arrangement in groups and scales, but it is vastly easier for a little deaf child if he is aided in accomplishing the work of acquiring these sounds by a judicious order in teaching so that he may not be confused by attempting to learn at the same time elements too closely resembling each other in formation. The breath consonants may be well taught first, then voice consonants and vowels. We would suggest the following order as one which presents, possibly, as few difficulties as any other.

Teach Group I first. When that is complete, teach the sounds contained in II and III at the same time, taking sounds alternately from each.

Group I.

- | | | |
|-------|-------------------|--------|
| 1. h | 4. p ₁ | 7. s |
| 2. wh | 5. th | 8. k |
| 3. f | 6. t | 9. sh |
| | | 10. ch |

Group II.

- | | | | |
|-------------------|-------|--------|-------|
| 1. v ₂ | 5. qu | *9. b— | 13. l |
| 2. th | 6. n | 10. d— | 14. x |
| 3. z | 7. r— | 11. g— | |
| 4. m | 8. ng | 12. j— | |

Group III.

- | | | | |
|----------------------|--------|--------------------|---------|
| 1. a(r) ₂ | 5. ur | 9. oo ₂ | 13. -i— |
| 2. oo | 6. ou | 10. i-e | 14. oi |
| 3. aw | 7. -u— | 11. -o— | 15. a-e |
| 4. ee | 8. o-e | 12. u-e | 16. -a— |
| | | | 17. -e— |

*9. 10. 11 and 12 may well be taught together, the *final* b, d, g, j, being taught later. *Ch* is sometimes better taught later than the place assigned it in Group I.

If deemed advisable to teach *consonant w*, *zh* and *consonant y*—, *w*— should be taught as vocalized *wh*, *zh* as vocalized *sh*, and *y*— as *consonant e*, or a closer form of the vowel *ee*.

We have omitted from this list of sounds selected for description some sounds found in the speech of most educated people, but we believe that we have omitted none that are essential to an intelligible pronunciation of our mother tongue.

GENERAL NOTES ON ELEMENTARY SOUNDS.

“Resonance in an unobstructed oral passage is the characteristic feature of the vowels; and the peculiar resonance in the case of each vowel is what mainly distinguishes it individually from the others. Obstructive action is the leading feature of the consonants; and the kind and manner of the obstruction is what mainly distinguishes one consonant from another.

“Obstruction is, indeed, not absent from the vowel. The vocal cords are set in vibration only as they obstruct the outgoing stream of breath. But this action does not go to differentiate the vowel qualities. There is, too, for the vowels, what may in one sense be called an obstruction in the oral passage; but only, or mainly, as involved in the formation of a vowel chamber, and thus as re-enforcing instead of obstructing the sound, and as subservient to the resonance that imparts the vowel quality. So far as it acts otherwise it gives to the vowel more or less of a consonantal character.

“Resonance, on the other hand, is not absent from the consonants. The nasals, *n*, *m*, *ng*, are marked as such by their peculiar resonance; and each has a different resonance to distinguish it from the others. The same is true of the sonant mutes, *b*, *d*, *g*. But all these are ruled out from the vowel category by the absolute closure of the oral passage. Except in the nasals and the sonant mutes, whatever resonance there may be has no share in forming the characteristic quality of the consonant.”
—*Preface to International Dictionary*, 1890.

“The accepted theory of vowel formation, is that the vowels are produced by adjustments of the oral cavity in such ways as to reinforce for the vowels respectively, certain of the ‘overtones’ or ‘upper partials’ or harmonic notes, that are contained in the tone produced in the larynx. As regards the palatal vowels, the ‘front vowels’ of Prof. Bell, I, at one time, supposed, as others, I

believe, have done, that the part of the oral cavity especially concerned was that between the front of the tongue and the soft palate. I have been led, however, to the conclusion that the part between the back of the tongue and the soft palate and the back wall of the pharynx is equally efficient, and its action equally essential.

"These vowels are divided into what Prof. Bell calls *high*, *mid* and *low*,—of which the vowels in *eat*, *ate*, *at*, may be taken respectively as examples,—according as the front of the tongue is more or less depressed. It is remarked by Henry Sweet ('Hand-book of Phonetics,' p. 211), referring to Bell's diagrams, that not 'only is the tongue lowered [in the front], but the point of greatest narrowness is shifted back, the size of the resonance-chamber being thus increased in both directions.' He adds that the passage to this chamber may be as narrow for so-called 'low' as for one that is 'mid' or 'high'; this passage being the place of greatest constriction between tongue and palate.

"The vowels as high, mid, and low, are subdivided, by Prof. Bell and Mr. Sweet, into the 'narrow' and the 'wide.' This difference, according to Mr. Sweet, depends on the shape of the upper surface of the tongue, as pressed upward convexly, or as relaxed and flattened. The effect would obviously be, while altering the shape of the passage, to make it narrower or wider. In fact, the whole of the tongue is lowered as the passage is widened. Examples are : *feet*, narrow; *fit*, wide; *fate*, without the *vanish*, narrow, *pet*, wide ; *have*, narrow ; *hat*, wide. My own view is that there should be marked more than two degrees of the narrow and the wide.

"But what I now aim to show is that, whether high, mid, or low ; and of each of these, whether narrow or wide, there is a resonance-cavity behind, as well as before, the place of greatest narrowness, and corresponding in size with the one before ; that is to say, smaller for the high, larger for the mid, and still larger for the low ; and, as I conjecture, tuned each to the same pitch with the one corresponding in front, so as to respond to the same harmonic note in the tone from the larynx. One effect, of course, is to shorten at each end the narrow passage, or part of the greatest constriction for the mid, and still more for the low."—*Professor Samuel Porter, Report of Convention, 1884.*

"It may be affirmed :

"I. That the consonants modify the vowels with which they are associated in position, tone, inception and termination.

"II. That the positions of the organs in articulating the consonant sounds are influenced by those of the vowels which precede or follow.

"III. And it is also manifest that the organs of speech are always endeavoring to minimize muscular effort in combining sounds for the sake of ease, or as in mechanics, to economize force and avoid undue friction.

"IV. But the action of the organs of speech is facile or difficult, simple or complex, according to their relative positions and the muscular energy required in shifting them."—*Arnold's Manual, Vol. I.*

"If the breath pour out continuously, and the chest fall, the lungs will soon be exhausted.....the breath in articulation is exploded from the *mouth*, and not from the chest. The space within which the air is compressed is *above* the glottis, and the effect of the compression must not be communicated below the glottis."—*Bell's Principles of Speech and Dictionary of Sounds, p. 162.*

Among the Articulations there are various degrees of quantity. The vocal articulations are essentially longer than the non-vocal but in each class there are varieties. Thus: The Breath Obstructives, P, T, K, are the shortest.

The Breath Continuous Elements, F, Th, S, Sh, are the next longer.

The Shut Voice Articulations, B, D, G, are the next in length.

The Close Continuous Voice Articulations, V, Th, Z, Zh, are longer still.

The Open Continuous Voice Articulations (or Liquids) L, M, N, Ng, are the longest simple articulations.

Wh, W, Y, R, are not included, because these articulations do not occur after vowels, but only as initials in English ; and all initial letters, whether voice or breath, are alike in quantity."—*Bell's Principles of Speech and Dictionary of Sounds.*

¹"According to Dr. Ernest Brucke, of Vienna, the three vowel sounds of *E*, (as in *he*,) *A* (as in *ah*,) and *O*, (as in *cool*,) are the fundamental sounds upon which the system of vowels rests ; the other vowels being only intermediate sounds resulting from these three. Of these three vowels, *A* is produced without any change in resonator (i. e., the pharynx, and the oral and nasal cavities); *O* by lengthening it and narrowing its exterior end,

¹The *O* wherever it appears in the following quotation is intended to represent our English *OO*.

and E by shortening it and narrowing it. Or, with respect to the length of the resonator, we may say it is greater with O, and least with E, and intermediate with A.

“Let us begin with A. Separate the jaws so far as to admit the thumb between the teeth ; keep the lips perfectly still, without pressing them against the teeth, or thrusting them out, but in such a way as to leave the extremities of the front teeth slightly visible ; then perform a sounding expiration. The tongue should be perfectly flat and inactive, at the bottom of the oral cavity ; or, better still, it may be made to assume a longitudinally concave position. A is the only vowel in the production of which the hyoid bone preserves the same position as when the organs are inactive ; the larynx, however, is carried upward, somewhat, so that the sounding air column, issuing from it, shall strike more forcibly against the roots of the upper incisors than against any other part.

“The transition from A to E is effected by the elevation of the larynx and the hyoid bone, without the relative positions being altered ; from A to O by the larynx being drawn downward as far as possible away from the hyoid bone, which is carried forward somewhat. The production of E (as in *he*) requires the greatest narrowing of the oral passage, and the greatest shortening of the resonator. The *first* is effected in this way : the middle portion of the tongue is brought on both sides in contact with the palate, while its tip is made to press against the lower incisors (without, however, projecting beyond them) and its body being placed so as to present a longitudinal cavity through which the air passes. The *second* is effected by carrying the larynx upward as far as possible, while the resonator at the opposite end is shortened by drawing the corners of the mouth back in the direction of the ears. In the production of O (as in *cool*), the larynx occupies the most depressed position. The resonator is consequently the longest and is narrowed at its exterior end. The lips are thrust forward in such a way as to leave only a small, nearly circular opening between them. The tip of the tongue, which with E was placed against the lower incisors, is drawn back a little from the teeth and held on a level with the edges of the lower incisors, while the back of the tongue is slightly arched.”—*Guttmann's Gymnastics of the Voice*.

The following is a list of the English vowels numbered from 1 to 13. Those which when accented are always long are marked (—): those which are always short (—); and those which are sometimes long and sometimes short (—):

NUMERICAL NOTATION OF ENGLISH VOWELS.

1 (—) eel	pull, pool, (—) 13
2 (—) ill	old, (—) 12
3 (—) ale	ore, (—) 11
4 (—) ell, ere	on, all, (—) 10
5 (—) an	up, urn, (—) 9
6 (—) ask	earn, (—) 8
7 (—) ah	

—*Bell's Principles of Speech and Dictionary of Sounds.*

“The cavities which modify vowels consist not only of the visible cavity in front of the vowel aperture, but also of one simultaneously formed behind the tongue ; and these two resonance chambers are of different pitch.”—*Bell's Visible Speech and Vocal Physiology.*

“A vowel is a syllabic sound moulded by a definite and momentarily fixed, or tense configuration of the free channel of the mouth, and creating no oral sybilation or friction in its emission. A vowel without a fixed configuration loses its syllabic effect and becomes a glide, and a glide with sibilation or friction in the oral channel becomes a consonant. Consonants, like glides, are merely transitional sounds, but their configurations may be held, so as to receive syllabic impulse, in which case a consonant without a vowel has the effect of a syllable. All vowels make syllables. Primary vowels are those which are most allied to consonants, the voice-channel being expanded only so far as to remove all fricative quality. The same organic adjustments form ‘wide’ vowels when the resonant cavity is enlarged behind the configurative aperture ;—the physical cause of ‘wide’ quality being retraction of the palate, and expansion of the pharynx.”—*Inaugural Edition of Visible Speech.*

MY LIST OF HOMOPHENOUS WORDS.

EMMA SNOW, NEOSHO FALLS, KANSAS.

Continued from the ASSOCIATION REVIEW of April, 1903.

puzzle, bustle, muscle, mussel,
muzzle.
pyre, mire.

Q.

quacks, wags, whacks, wax.
quail, wail, whale.
quake, wake.
quart, ward, warned, wart.
quarter, warder.
quarts, quartz.
quartz, quarts.
quash, wash.
quaver, wafer, waver.
quay, key.
queen, wean, weed, wheat.
quell, well.
quench, wench.
quest, west.
queue, cue, coo.
quick, whig, wick, wig, wing,
wink.
quicken, wicked, wicket.
quid, quint, quit, whit, win, wit.
quill, will.
quilled, quilt, willed, wilt.
quilt, quilled, willed, wilt.
quince, wince, wins.
quint, quid, quit, whit, win, wit.
quip, whim, whip.
quire, choir, wire.
quit, quid, quint, whit, win, wit.
quite, white, whine, wide, wind.
quote, won't.

R.

rabbit, rabid, rapid.
rabble, ramble.
rabid, rabbit, rapid.
race, raise, rays, raze.
race, razor.
rack, rag, rang, rank, wrack.
racket, ragged.
rag, rack, rang, rank, wrack.
rage, range.
ragged, racket.
raid, rained, rate, reigned.
rains, reins.
raise, race, rays, raze.
ram, ramp, rap, wrap.
ramble, rabble.
ramp, ram, rap, wrap.
ran, rant, rat.
ranch, rash.
rang, rack, rag, rank, wrack.
range, rage.
rank, rack, rag, rang, wrack.
rant, ran, rat.
rap, ram, ramp, wrap.
rapid, rabbit, rabid.
rapper, wrapper.
rapt, wrapped.
rash, ranch.
rat, ran, rant.
rays, race, raise, raze.
raze, race, raise, rays.
razor, racer.
read, reed.
read, red, rend, rent, wren.

- ready, ruddy.
 ream, reap.
 reap, ream.
 rebate, remained, repaid.
 rebel, repel.
 rebound, remound.
 recede, receipt, reseal.
 receipt, recede, reseal.
 recite, reside, resigned.
 red, read, rend, rent, wren.
 redoubt, redound, renown.
 redound, redoubt, renown.
 redder, render.
 reed, read.
 reef, recve.
 reek, wreak.
 reeve, reef.
 referred, revert.
 refers, reverse.
 refuse, reviews.
 reigned, raid, rained, rate.
 reins, rains.
 relied, relight.
 relight, relied.
 remained, rebate, repaid.
 remind, repined.
 remount, rebound.
 rend, read, red, rent, wren.
 render, redder.
 renowned, redoubt, redound.
 rent, read, red, rend, wren.
 repaid, rebate, remained.
 repassed, repast.
 repast, repassed.
 repel, rebel.
 repined, remind.
 reseal, recede, receipt.
 resent, reset.
 reset, resent.
 reside, recite, resigned.
 resigned, recite, reside.
 rest, wrest.
 reverse, refers.
 revert, referred.
 rate, raid, rained, reigned.
- reviews, refuse.
 rheum, room.
 rhyme, ripe.
 rib, rim.
 rice, rise.
 rich, ridge.
 riches, ridges.
 rick, rig, ring, rink, wring.
 rid, writ.
 ridden, written.
 ride, right, rind, rite, write.
 ridge, rich.
 rifle, rival.
 rig, rick, ring, rink, wring.
 rigger, rigor, ringer, wringer.
 right, ride, rind, rite, write.
 rigor, rigger, ringer, wringer.
 rim, rib, rip.
 rimple, ripple.
 rind, ride, right, rite, write.
 ring, rick, rig, rink, wring.
 ringer, rigger, rigor, wringer.
 rink, rick, rig, ring, wring.
 rip, rib, rim.
 ripe, rhyme.
 ripple, rimple.
 rise, rice.
 rite, ride, right, rind, write.
 rival, rifle.
 road, roan, rode, rote, rowed,
 wrote.
 roam, robe, rope.
 roan, road, rode, rote, rowed,
 wrote.
 roar, rower.
 rob, romp.
 robe, roam, rope.
 roc, rock.
 rock, roc.
 rod, rot.
 rode, road, roan, rote, rowed,
 wrote.
 roe, row.
 roes, rose, rows.
 role, roll.

My List of Homophenous Words.

roll, role.
romp, rob.
room, rheum.
root, route, rude, rued.
rope, roam, robe.
rose roes, rows
rot, rod.
rote, road, roan, rode, rowed,
wrote.
rouge, ruche.
rough, ruff.
round, rout.
rout, round.
route, root, rude, rued.
row, roe.
rowed, road, roan, rode, rote,
wrote.
rower, roar.
rows, roes, rose.
rub, rum, rump.
rubble, rumble.
ruche, rouge.
ruck, rug, rung, wrung.
ruddy, ready.
rude, root, route, rued.
rued, root, route, rude.
ruff, rough.
rug, ruck, rung, wrung.
rum, rub, rump.
rump, rub, rum.
run, runt, rut.
runt, run, rut.
rut, run, runt.
rye, cry, wry.

S

sack, sag, sang, sank, sacque.
sacks, sax, yax.
sacque, sack, sag, sang, sank.
sad, sand, sat.
saddle, sandal.
safe, save.
sag, sack, sang, sank, sacque.
said, cent, scent, send, sent, set.

sail, sale.
sale, sail.
saloon, salute.
salter, psalter.
sand, sad, sat.
sane, sate, seine.
sat, sad, sand.
sate, sane, seine.
sauce, saws.
save, safe.
saver, savor.
savor, saver.
saws, sauce.
sax, sacks, yax.
scab, scamp.
scamp, scab.
scanned, scat, scant.
scant, scanned, scat.
scat, scanned, scant.
scene, cede, seat, seed, seen..
scenes, cease, seas, seize, sees.
scent, cent, said, send, sent, set.
science, zions.
scrabble, scramble.
scramble, scrabble.
screed, screen.
screen, screed.
scrim, scrimp, scrip.
scrimp, scrim, scrip.
scrip, scrim, scrimp.
scull, skull.
sea, see.
seal, ceil, zeal.
seam, seem, seep.
seap, seam, seem.
sear, cere, seer.
search, serge, surge.
seas, cease, scenes, sees, seize.
sects, sex.
see, sea.
seed, cede, scene, seat, seen.
seem, seam, seep.
seen, cede, scene, seat, seed.
seep, seam, seem.
seer, cere, sear.

sickle, single.
 side, cite, sighed, sight, signed,
 site.
 sider, cider.
 sieved, sift.
 sift, sieved.
 sighed, cite, side, sight, signed,
 site.
 sighs, size.
 sight, cite, side, sighed, signed,
 site.
 signed, cite, side, sighed, sight,
 site.
 signet, cygnet.
 simple, cymbal, symbol.
 sin, sit.
 since, sins.
 sing, cinque, sick, sink.
 single, sickle.
 sink, cinque, sick, sing.
 sins, since.
 sister, xyster.
 sit, sin.
 site, cide, side, sighed, sight,
 signed.
 size, sighs.
 skate, skein.
 skein, skate.
 skid, skin, skit.
 skim, skip.
 skimmer, skipper.
 skin, skid, skit.
 skip, skim.
 skipper, skimmer.
 skit, skid, skin.
 skull, scull.
 slab, slam, slap.
 slack, slag, slang, slank.
 slag, slack, slang, slank.
 slain, slate.
 slam, slab, slap, snap.
 slang, slack, slag, slank.
 slank, slack, slag, slang.
 slant, slat.
 slap, slab, slam, snap.

slat, slant.
 slate, slain.
 slay, sleigh.
 sleigh, slay.
 sleight, slide, slight.
 slew, slue.
 slick, sling, slink.
 slid, slit.
 slide, sleight, slight.
 slight, sleight, slide.
 slim, slip.
 sling, slick, slink.
 slink, slick, sling.
 slip, slim.
 slit, slid.
 sloam, slope.
 sloe, slow.
 slope, sloam.
 slow, sloe.
 slue, slew.
 slues, sluice.
 slug, slung, slunk.
 sluice, slues.
 slum, slump.
 slump, slum.
 slung, slug, slunk, snug.
 slunk, slug, slung, snug.
 smack, spank.
 smatter, spatter.
 smear, spear.
 smell, spell.
 smelt, spelled.
 smelter, spelter.
 smite, spied, spine, spite.
 smoke, spoke.
 smout, spout.
 smudge, sponge.
 smug, spunk.
 smut, spun, sput.
 snack, snag, stack, stag, stank.
 snag, snack, stack, stag, stank.
 snail, stale.
 snake, stake, steak.
 snap, slab, slam, slap.
 snare, stair, stare.

sees, cease, scenes, seas, seize.
seignior, senior.
seine, sane, sate.
seize, cease, scenes, seas, sees.
sell, cell.
seller, cellar.
send, cent, said, scent, sent, set.
senior, seignior.
sense, cense.
sensual, censual.
sent, cent, said, scent, send, set.
serf, serve, surf.
serve, serf, surf.
session, cession.
set, cent, said, scent, send, sent.
setter, center.
sew, so, sow.
sever, zephyr.
sex, sects.
shabby, chamois.
shack, Jack, jag, shag, shank.
shackle, jackal, jangle.
shad, chat.
shade, chain, jade.
shaft, chaffed.
shag, Jack, jag, shack, shank.
shagged, jacket, jagged.
shah, jay.
shale, jail.
sham, champ, chap, jam, jamb.
shamble, chapel.
shame, shape.
shank, Jack, jag, shack, shag.
shape, shame.
share, chair.
sharp, charm.
shatter, chatter.
shave, chafe.
she, gee.
sheaf, chief, sheave.
shear, cheer, jeer, sheer.
shears, sheers.
sheath, sheathe.
sheathe, sheath.
sheave, chief, sheaf.

shed, jet.
sheep, cheap, cheep.
sheer, cheer, jeer, shear.
sheers, shears.
sheet, cheat.
sheeting, cheating.
sheik, cheek.
shelf, shelve.
shell, jell.
shelve, shelf.
shepherd, jeopard.
sherry, cherry.
shied, chide, shine.
shilling, chilling.
shimmer, shipper.
shin, chin, chit, gin, jin.
shine, chide, shied.
shingle, jiggle, jingle.
ship, chip, jib.
shipper, shimmer.
shirk, jerk.
shirred, shirt.
shirt, shirred.
shoat, shone, showed, shown.
shock, chock, Jock, jog.
shod, jot, shot.
shoe, chew, shoo.
shone, shoat, showed, shown.
shoo, chew, shoe.
shoot, chewed, chute, June, jute.
shop, chop, job.
shorn, short.
short, shorn.
shot, jot, shod.
showed, shoat, shone, shown.
shown, shoat, shone, showed.
shrug, shrunk.
shrunk, shrug.
shudder, shutter.
shuck, chuck, chunk, jug.
shunned, jut, shunt, shut.
shunt, jut, shunned, shut.
shut, jut, shunned, shunt.
shutter, shudder.
sick, cinque, jig, sing, sink.

sneer, steer.
 sniff, stiff.
 snivel, stiffen.
 snob, slop, stop.
 snood, stood.
 snoop, stoop.
 snore, store.
 snout, stout.
 snub, stub, stump.
 snuff, stuff.
 snug, stuck, stung, stunk.
 so, sew, sow.
 soar, sore, sower.
 soared, sword.
 sob, sop.
 sock, song.
 sod, sot.
 sold, soled.
 sole, soul.
 soled, sold.
 some, sub, sum, sup.
 son, sun.
 song, sock.
 soon, sued, suit.
 sop, sob.
 sore, soar, sower.
 sot, sod.
 soul, sole.
 souse, sows.
 sōw, so, sew.
 sower, soar, sore.
 sown, zone.
 sows, souse.
 spanned, spat.
 spank, smack.
 sparred, smart.
 spat, spanned.
 spear, smear.
 sped, spend, spent.
 spell, smell.
 spelled, smelt.
 spelter, smelter.
 spend, sped, spent.
 spent, sped, spend.
 spice, spies.

spied, smite, spine, spite.
 spies, spice.
 spin, spit.
 spine, smite, spied, spite.
 spit, spin.
 spite, smite, spied, spine.
 splint, split.
 split, splint.
 spoke, smoke.
 sponge, smudge.
 spout, smout.
 sprained, sprayed.
 sprayed, sprained.
 sprig, spring.
 spright, sprite, spryed.
 spring, sprig.
 spun, smut, sput.
 spurned, spurred, spurt.
 spurred, spurned, spurt.
 sput, smut, spun.
 squad, squat.
 square, swear.
 squat, squad.
 squib, swim.
 squid, squint.
 squint, squid.
 stab, stamp.
 stack, stag, stank.
 stag, stack, stank.
 staid, stained, state, stayed.
 stained, staid, state, stayed.
 stair, snare, stare.
 stake, snake, steak.
 stalk, stock.
 stamp, stab.
 stare, snare, stair.
 starred, start.
 start, starred.
 state, staid, stained, stayed.
 stayed, staid, stained, state.
 steak, snake, stake.
 steal, steel.
 steam, steep.
 steel, steal.
 steep, steam.

steer, sneer.
stem, step, steppe.
step, stem, steppe.
steppe, stem, step.
stick, sting, stink.
stiff, sniff.
stiffen, snivel.
stile, style.
stilled, stilt.
stilt, stilled.
sting, stick, stink.
stink, stick, sting.
stock, stalk.
stoned, stowed.
stoop, snoop.
stop, slop, snob.
store, snore.
stout, snout.
stow, slow, snow.
stowed, stoned.
straggle, strangle.
straight, strained, strait, strayed.
strained, straight, strait, strayed.
strait, straight, strained, strayed.
strangle, straggle.
strayed, straight, strained, strait.
struck, strung.
strung, struck.
stub, snub, stump.
stuck, snug, stung, stunk.
stud, stunned, stunt.
stuff, snuff.
stump, snub, stub.
stung, snug, stuck, stunk.
stunk, snug, stuck, stung.
stunned, stud, stunt.
stunt, stud, stunned.
style, stile.
sub, some, sum, sup.
succor, sucker.
suck, sung, sunk.
sucker, succor.
sued, soon, suit.
suit, soon, sued.
suite, sweet.

sum, some, sub, sup.
summer, supper.
sun, son.
sup, some, sub, sum.
supper, summer.
surf, serf, serve.
surge, search, serge.
swab, swamp, swap.
swamp, swab, swap.
swap, swab, swamp.
swear, square.
sweet, suite.
swing, swig.
swing, swig.
swinge, switch.
switch, swinge.
sword, soared.
symbol, cymbal, simple.

T.

tab, dab, dam, damn, damp
tamp, tap.
tack, tag, tank.
tacked, tact.
tackle, dangle, taggle, tangle.
tacks, tax, task.
tact, tacked.
tag, tack, tank.
taggle, dangle, tackle, tangle.
tail, dale, nail, tale.
taint, deigned.
take, lake, make.
tale, dale, nail, tail.
tall, doll.
tally, dally.
tame, dame, tape.
tamp, dab, dam, damn, damp,
tab, tap.
tan, dad, tat.
tangle, dangle, tackle, taggle.
tank, tack, tag.
tap, dab, dam, damn, damp,
tab, tamp.
tape, dame, tame.
taper, tapir.

tapir, taper.
 tare, dare, tear.
 tart, dart.
 task, tacks, tax.
 tassel, dazzle.
 tat, dad, tan.
 tattle, dandle.
 taught, taut, tawed.
 taut, taught, tawed.
 taw, daw.
 tawed, taught, taut.
 tax, tacks, task.
 tea, tee.
 teach, leach, leech, liege.
 team, deem, deep, teem.
 teamster, deamster.
 tear, dare, tare.
 tear, dear, deer, tier.
 tears, tierce, tiers.
 tee, tea.
 teem, deem, deep, team.
 teens, deans, tease.
 tell, dell, knell.
 ten, dead, debt, den, dent, tend,
 tent.
 tend, dead, debt, den, dent, ten,
 tent.
 tender, tenter, tetter.
 tense, dens, dense.
 tent, dead, debt, den, dent, ten,
 tend.
 tenter, tender, tetter.
 tenth, death, length.
 terse, nurse.
 test, lest, nest.
 tetter, tender, tenter.
 text, next.
 than, that.
 that, than.
 thawed, thought.
 the, thee.
 thee, the.
 their, there.
 then, thin.
 thick, thing, think.

thicken, thicket.
 thigh, thy.
 thin, then.
 thing, thick, think.
 think, thick, thing.
 thought, thawed.
 thread, threat.
 threat, thread.
 threw, through.
 throe, throw.
 throne, throat, thrown.
 through, threw.
 throw, throe.
 thrown, throat, throne.
 thumb, thump.
 thump, thumb.
 thy, thigh.
 tick--tack, knick-nack.
 tickle, dingle, tingle, tinkle.
 tide, died, diet, tied, tight.
 tie, die, dye.
 tied, died, diet, tide, tight.
 tier, dear, deer, tear.
 tierce, tears, tiers.
 tiers, tears, tierce.
 tight, died, diet, tide, tied.
 till, dill.
 tiller, dinner, tinder, tinner,
 titter.
 timber, dimmer, timbre.
 timbre, dimmer, timber.
 time, dime, type.
 tin, did, din, dint, tint, tit.
 tinder, dinner, tiller, tinner,
 titter.
 tine, dine.
 tinge, dish, ditch.
 tingle, dingle, tickle, tinkle.
 tinker, digger.
 tinkle, dingle, tickle, tingle.
 tinner, dinner, tiller, tinder,
 titter.
 tint, did, din, dint, tin, tit.
 tip, dim, dip.
 tipple, dimple.

tire, dire, dyer.
tithe, ninth, lithe.
titter, dinner, tiller, tinder,
tinner.
to, dew, do, due, too, two.
toad, don't, dote, toat, toned,
towed.
tottle, dottle.
toe, do, doe, dough, tow.
tog, dock.
toggle, noggle.
told, tolled.
toll, dole, knoll.
tolled, told.
tomb, doom, dupe, tube.
tome, dobe, dome.
ton, done, dun, tun, tut.
toned, don't, dote, toad, toat,
towed.
tongs, dogs.
tongue, duck, dug, dung, tuck,
tug.
too, dew, do, due, to, two.
tool, tulle.
toot, dude, dune, tune.
tore, door.
torn, dorn.
tot, dod, don.
touch, dutch.
touchy, dutchy.
tough, dove, duff.
toughed, tuft.
tow, do, doe, dough, toe.
towed, don't, dote, toad, toat,
toned.
towel, dowel.
tower, dower.
town, doubt, down.
toys, noise.
trace, trays.
track, drag, drank.
tracked, tract.
tract, tracked.
trade, drained, trained, trait.
trained, drained, trade, trait.

trait, drained, trade, trained.
tram, drab, drachm, dram, tramp,
trap.
tramp, drab, drachm, dram,
tram, trap.
trap, drab, drachm, dram, tram,
tramp.
trawl, drawl.
tray, dray.
trays, trace.
tread, dread, trend.
treat, treed.
treble, tremble.
treed, treat.
tremble, treble.
trench, dredge, drench.
trend, dread, tread.
tress, dress.
tribe, tripe.
trick, drink, trig.
tricker, drinker, trigger.
trickle, trinkle.
trig, drink, trick.
trigger, drinker, tricker.
trill, drill.
trim, drip, trip.
trinkle, trickle.
trip, drip, trim.
tripe, tribe.
triplet, driplet.
troop, droop, troupe.
troupe, droop, troop.
trout, drowned.
truck, drug, drunk, trunk.
trudge, drudge.
true, drew.
trump, drub, drum.
trunk, drug, drunk, truck.
trussed, trust.
trust, trussed.
try, dry.
tub, dub, dumb, dump.
tube, doom, dupe, tomb.
tuck, duck, dug, dung, tongue.
tug.

tuft, toughed.
 tug, duck, dug, dung, tongue,
 tuck.
 tulle, tool.
 tumble, double.
 tun, done, dun, ton, tut.
 tune, toot, dude, dune.
 turf, nerve.
 turn, dirt, learn.
 tusk, dusk.
 tussel, nuzzle.
 tut, done, dun, ton, tun.
 twice, twines.
 twin, twit.
 twines, twice.
 twinge, twitch.
 twit, twin.
 twitch, twinge.
 two, dew, do, due, to, too.
 type, dime, time.

U.

udder, hunter, under, utter.
 umber, upper.
 unblessed, unpleasant.
 under, udder, hunter, utter.
 undid, unknit.
 undo, undue, unto.
 undyed, untied.
 unfailing, unveiling.
 unfounded, confounded.
 unknit, undid.
 unknown, unload.
 unload, unknown.
 unmade, unpaid.
 unpaid, unmade.
 unpleasant, unblessed.
 unseat, unseen
 unseen, unseat.
 unstate, unstayed.
 unstayed, unstate.
 untied, undyed.
 unto, undo, undue.
 unveiling, unfailing.
 unwebbed, unwept.

unwept, unwebbed.
 upper, umber.
 urn, earn, heard, herd, hurt.
 use, goose.
 usher, husher.
 utter, hunter, udder, under.

V.

vague, fake.
 vain, fade, fain, faint, fate, feign,
 feint, fete, vane, vein.
 vale, fail, veil.
 van, fad, fan, fat, vat.
 vane, fade, fain, faint, fate, feign,
 feint, fete, vain, vein.
 vase, fase, phase.
 vast, fast.
 vat, fad, fan, fat, van.
 vault, fault.
 vaulter, falter.
 veal, feel.
 veer, fear.
 veil, fail, vale.
 vein, fade, fain, faint, fate, feign,
 feint, fete, vain, vane.
 vend, fed, fen, fend, vent.
 venerate, federate.
 vent, fed, fen, fend, vend.
 verb, firm.
 versed, first.
 very, ferry.
 vetch, fetch.
 vial, file, phial, vile, viol.
 vice, vies.
 victual, fiddle.
 vie, fie.
 vied, fight, find, fined.
 vies, vice.
 view, few.
 views, fuse.
 vile, file, phial, vial, viol.
 vim, fib.
 vine, fine.
 viol, file, phial, vial, vile.
 violent, violet.

violet, violent.
viper, fiber.
vision, fission.
vocal, focal.
vogue, folk.
voiced, foist.
volley, folly.
vowed, found, fount.
vowel, foul, fowl.

W.

wad, wan, wand.
wade, wait, waned, weight.
waddle, wattle.
wage, wedge.
wags, quacks, whacks, wax.
waif, waive, wave.
wafer, quaver, waver.
wail, quail, whale.
waist, waste.
wait, wade, waned, weight.
waive, waif, wave.
wake, quake.
wall, waul.
wan, wad, wand.
wand, wad, wan.
waned, wade, wait, weight.
ward, quart, warned, wart.
warder, quarter.
ware, wear, where.
warm, warp.
warp, warm.
wart, quart, ward, warned.
was, once, ones.
wash, quash.
waste, waist.
wattle, waddle.
waul, wall.
wave, waif, waive.
waver, quaver, wafer.
wax, quacks, wags, whacks.
way, weigh, whey.
we, wee.
weak, week.
weal, wheal, wheel.

wean, queen, weed, wheat.
wear, ware, where.
weather, wether, whether.
webbed, wept.
wed, wen, wend, went, wet,
 when, whet.
wedge, wage.
wee, we.
weed, queen, wean, wheat.
week, weak.
weigh, way, whey.
weight, wade, wait, waned.
weld, welt.
welt, weld.
wen, wed, wen, wend, wet,
 when, whet.
wench, quench.
wend, wed, wen, went, wet,
 when, whet.
went, wed, wen, wend, wet,
 when, whet.
west, quest.
wet, wed, wen, wend, went,
 when, whet.
wether, weather, whether.
whacks, quacks, wags, wax.
whale, quail, wail.
wheal, weal, wheel.
wheel, weal, wheal.
wheeled, wield.
whelm, whelp.
whelp, whelm.
when, wed, wen, wend, went,
 wet, whet.
where, ware, wear.
whet, wed, wen, wend, went,
 wet, when.
whether, weather, wether.
whew, woo.
whey, way, weigh.
which, wish, witch.
whig, quick, wick, wig, wing,
 wink.
while, wild, wile.
whim, whip.

whip, whim.
 whine, quite, white, wide, wight,
 wind, wine.
 whirled, world.
 whit, quid, quint, quit, wind, win,
 wit.
 white, quite, whine, wight, wide,
 wind, wine.
 whither, wither.
 whitlow, window.
 who, hoo.
 whoa, woe.
 whole, hole.
 whom, whoop.
 whoop, whom.
 whore, hoar, oar, o'er, ore.
 whose, hews, hues, ooze.
 wick, quick, whig, wig, wing,
 wink.
 wicked, quicken, wicket.
 wicket, quicken, wicked.
 widow, willow, winnow.
 wield, wheeled.
 wig, quick, whig, wick, wing,
 wink.
 wight, quite, whine, white, wide,
 wind, wine.
 wild, while, wile.
 wile, while, wild.
 will, quill.
 willed, quilled, quilt, wilt.
 willow, widow, winnow.
 wilt, quilled, quilt, willed.
 win, quid, quint, quit, whit,
 wind, wit.
 wince, quince, wins.
 wind, quid, quint, quit, whit, win,
 wit.
 wind, quite, whine, white, wide,
 wight, wine.
 window, whitlow.
 wine, quite, whine, white, wide,
 wight, wind.
 wing, quick, whig, wick, wig,
 wink.

wink, quick, whig, wick, wig,
 wing.
 winnow, widow, willow.
 wins, quince, wince.
 wire, choir, quire.
 wish, which, witch.
 wit, quid, quint, quit. whit, win,
 wind.
 witch, which, wish.
 wither, whither.
 woe, whoa.
 won, one, wont.
 wont, one, won.
 won't, quote.
 woo, whew.
 wood, would.
 wooden, wouldn't.
 word, whirred, wort.
 world, whirled.
 wort, whirred, word.
 would, wood.
 wouldn't, wooden.
 wrack, rack, rag, rang, rank.
 wrap, ram, rap.
 wrapped, rapt.
 wrapper, rapper.
 wreak, reek.
 wren, read, red, rend, rent.
 wrench, wretch.
 wretch, wrench.
 wriggle, wrinkle.
 wring, rick, rig, ring, rīnk.
 wringer, rigger, rigor, ringer.
 wrinkle, wriggle.
 writ, rid.
 write, ride, right, rind, rite.
 written, ridden.
 wrote, road, roan, rode, rote,
 rowed.
 wrung, ruck, rug, rung.
 wry, cry, rye.

X

xyster, sister.

Y

yacht, caught, cod, con, cot,
god, got.
yak, yank.
yank, yak.
yard, cairn, card, cart, guard,
yarn.
yarn, cairn, card, cart, guard,
yard.

year, gear.
yes, guess.
yet, get.
yew, ewe, hew, hue, you.
yoke, yolk.
yolk, yoke.
yon, gone.
you, ewe, hew, hue, yew.
your, ewer.

[These words were inadvertently omitted from their proper place in the April REVIEW.]

P.

pluck, plug, plung.
plug, pluck, plung.
plum, plumb, plump.
plumb, plum, plump.
plumber, blubber, plumper.
plume, bloom.
plump, plumb, plum.
plumper, blubber, plumber.
plunder, blunder.

plung, pluck, plug.
plunge, blush, plush.
plush, blush, plunge.
pock, bog, mock.
pod, pot.
poise, boys.
polar, molar.
pole, hole, boll, bowl, mole, poll.
polled, bold, bowled, bolt, mold.
pond, bond, bought, pawned.
pone, bone, moan, mown.

SOME DIDACTIC QUESTIONS.¹

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I think that the reader will now be desirous of knowing whether in the practice of the school, and in all the minutiae of teaching, our colleagues in America have made greater progress than we. Now this I do not dare to affirm in regard to the scientific principles on which our didactic work is based ; but I can say that in the practical part they have gone much farther than we have.

One must observe in the first place that on account of the great liberty which is given to the teacher in the American schools, one hears discussed as something new, questions that have long since been laid aside in our special literature in Europe. However, while in Europe these questions have remained mere theories, in America they are put to the proof of practical experience, and thus a judgment can be made favorable or not, and a decision taken for the future.

Everything considered, our colleagues across the Atlantic have two great advantages over us: the material and moral organization of the schools, and the much greater length of the scholastic course. They are advantages which permit them to experiment with every new proposal made in Pedagogy and Didactics, and to provide better for practical results. But in order to show this more clearly, I will treat particularly the most vital questions and also those of general interest for our schools.

§I. PRONUNCIATION AND SPEECH.¹

It has recently been noticed by the American teachers themselves, that the oral method is in a period of truce in respect to the increase of the schools which are more or less oral. However one must not think that this means loss of faith, nor arrest of development. Even a superficial visit to the schools would

¹From the "American Notes about the Education of the Deaf," a book soon to be published in Italy by G. Ferreri.—XII. Chapter, §I.

persuade one that this inaction is more apparent than real. All the energies of the principals and teachers tend to one and the same object, which is to establish in the most definite manner possible, the fundamental principles of teaching speech to the deaf. And the effect of this collective tendency is seen also in the institutes where the combined system includes the teaching of articulate speech.

Notwithstanding the beneficial effect of all this study and labor to render the teacher more capable of his mission, there exist marked divergences in regard to the teaching of speech.

For the sake of brevity, I will merely allude to two of these divergences of opinion, as those on which principally depend the practical direction of the school of articulation :

The first is that of the absolute and relative value of the vowel and consonant elements of the word in regard to its intelligibility.

The second is the same one which was discussed at the Conference of Zurich in Sept. 1901, by the Director G. Kull, on the subject: "The teaching of articulation in the schools for the Deaf, should it be analytical or synthetic."

As to the first of these questions, we cannot discuss it on account of our incompetence, the difference between the two languages—Italian and English—being so great, that while with us the vowels are the foundation of speech, they may have in English only a secondary importance.

Dr. Bell, who is certainly an authority in matters of Phonetics and Elocution, affirms that in English the vowels have a secondary importance as to that of the consonants in respect to the intelligibility of speech. It is just the contrary of our language. We can say to the teacher of articulation: "Make sure of the vowels and the pronunciation will be intelligible even if some of the consonants are not perfect." It is true, however, that also in Italian the fundamental sounds of the vowels undergo variations in the accent of the word, but these variations are never such as to alter the position and the specific sound of the vowel. Perhaps it is due to this condition that the Italian language is the most susceptible to the metrical form of the classical languages (Latin and Greek);

while in English, at least at present, the classical rules for determining the length of the syllables are quite useless. In order to render artificial pronunciation intelligible in English, it is necessary above all to reach perfection in the consonant sounds, and perhaps this is an advantage for our colleagues of the English tongue as the number is almost unlimited of fundamental vocal sounds and of those modified by the various consonants which precede or follow them. Besides the English language is preeminently monosyllabic, and therefore in the phonetic grouping of the sentence the same word may be now *protonic* and now *postonic*. The intelligibility of the sentence depends however more upon the accent of the phonetic grouping than upon the individual value of the syllable or word. This, to tell the truth, happens also more or less in other languages. Indeed the speech is not intelligible always on account of the fluidity of the vocal sounds and the clearness of the voice, but it is so on account of the tonic accent of the word and sentence. But if we consider well, in our language the accent falls exclusively on the vowels, and the intonation of the laryngean sounds covers, like "the mantle of charity," the multitude of defects in the word, and gives us the acoustic illusion of having heard the word pronounced perfectly, when it is really our ears that complete it according to the well-known accent of the sentence. But as to this, in every language we must be indulgent to the deaf, rendered speaker by art. No matter how hard we may try to perfect his speech, it will always be the duty of normal persons to accustom themselves to the speech of the deaf.

The few exceptions which are presented to us by pupils who have regained in the oral school a clear voice and fluid speech and also not lacking in a certain intonation, only serve to confirm the rule. They are, however, an advantage to us because they keep present before us the ideal of our work, which can never be reached, but can be more or less approached. But when we present such cases at our public exercises in order that they may pay the expense of the ceremony, we cheat the public and deceive ourselves. The æsthetic, musical quality of speech will always be wanting in him who lacks the sense of hearing, which is the only means for correction and perfection of speech.

Visiting one day a school in America, I was struck by the answer of a boy, who said in a clear voice and with natural pronunciation "yes ma'am." I said at once to the teacher: "That boy can hear a little, or he has heard lately;" and it was really so. "Well," I added, "we must be satisfied if the others succeed in saying yes, without anything more."

The other of the two questions, although connected in part with the first, has now become of general interest. We also have often asked ourselves whether it would be better to follow the analytical or the synthetic process in first teaching speech to the Deaf and Dumb.

Now, in order to avoid a misunderstanding a consideration is necessary. Mr. Kull, already referred to, calls that process of teaching synthetic which, starting with the elements, comes step by step to the formation of the word and the sentence. I, instead, have always called this process analytical, in conformity with what has already been written upon synthetic lip-reading.

That process of articulation, on the contrary, should be synthetic which those claim to follow, in saying the entire word to the deaf from the very beginning, without preoccupation as to the elements which compose the syllables and words. Also Prof. Fornari, in translating the thesis of Kull, found himself in front of the same question, and wrote an article to demonstrate that both parties were right, as the matter depended upon the way in which it was considered. (See *Rassegna di Napoli*, February, 1903, pages 26-27). An explanation is therefore necessary in regard to it. I shall call that process analytical which is generally followed in the schools of articulation, based first upon the works of Bonet and Amman, and then upon those of the modern educators who followed its principles (Goguillot and Marchiö for example.)

I have seen that in the best oral schools of the United States they follow this same process as regards articulation, but they prefer to go on with the synthetic lip-reading. In this way the children of the kindergarten and the pupils of the first course are rendered capable of reading words and sentences from the lips before they are able to reproduce them with their own voice. And this one understands. In order to read from the lips a word

or a short sentence, or better still to get from it the synthetic, optical figure, it is not necessary to know part by part the elements which compose it ; but on the contrary in order to reproduce one and the other, it is indispensable to reach the synthesis by way of analysis, and to reproduce one by one the vocal and consonant elements from which the whole results.

It has been demonstrated by the greatest teachers of Germany that it is necessary for the best success of our teaching, and hence more suitable and opportune, to follow the process used until now, that is, "passing from the single elements to the phonetic unity of the word and sentence." I will therefore refer the reader to the most recent publications on this subject, and pass on to speak of the state of the question in the American schools.¹

The American advocates of the synthetic process (which seems to me an error after the observations I have made in the schools of the United States), maintain that the analytical process is not natural but artificial. However, they wish that one should speak to the deaf child just as to the hearing one, and in this they accept the great principle of Mr. Hill in all its extension : "Develop language in the deaf-mute in the same manner in which it is done by nature in the life of the child endowed with all his senses."

Now, it seems to me that there is a misunderstanding here. It is true that one does not teach the hearing child the elements of speech singly, for it learns to speak from hearing as well as by sight; but can one therefore state that the hearing child learns speech by the synthetic process?

Meanwhile let us consider the facts.

The hearing child in the long process of learning speech, always starts with the phonetic elements, coming step by step to the pronunciation of the entire word. Every one may have observed, as I did some years since in observing the development of speech in a hearing child :

¹Protokol der XXVIII. Konferenz württembergischer und badischer und der X. Konferenz schweizerischer Taubstummenlehren am 9, 10 und 11 Sept. 1901, in Zurich, page 48-70.—(See *Rassegna della Educazione dei sordomuti*, Jan. 1903, page 10).

1. That the normal child in its first attempts to reproduce the word, associates the acoustic images with those of sight, directing the eye constantly towards the mouth of the speaker.

2. That in these attempts the normal child repeats aloud, as well as to himself in an undertone, the single syllabic sounds which have made the greatest impression on him, and which he wishes to repeat in addressing the word to the persons who approach him.

3. That in this process of learning words, the normal child also succeeds in imitating the oral sounds according to the order of their mechanical difficulty and of their adaptation to the various parts of the vocal organs.

This does not prevent their saying at an early age words that seem to be entire, but which are only understood by those who are accustomed to hear their childish jargon every day.

No one therefore can doubt the fact of this graduated difficulty in the adaptation of the vocal organs, and in the phonetic perceptions which are shown in the counter-proof offered to us by the mothers and nurses :

1. Who foster in the beginning (and sometimes so long as to injure the correct pronunciation of the child), the childish defects of speech, changing the consonants into others which are easier, mutilating in fact the language in such a way that it would hardly be recognizable, were it not for the vowel sounds, when indeed these are not too cruelly tortured.

2. They contract the long words, in which the succession of vowels and consonants is varied, and the result is that one hears only the pronunciation of the last consonant or of some one near it.

3. Besides it is too common a thing to have escaped the observation of any one, that certain lingual sounds, simple and compound (r, s, gna, glia, z), are acquired by the hearing and normal child later than the others, limiting ourselves here to the Italian language. Indeed sometimes the mechanical difficulty in imitating them is so great that the child does not speak them perfectly even when he enters the primary school.

Besides it is very common to say that a normal child stutters, when he is not yet capable of imitating articulate speech to perfection.

From what has been said, not to be verbose, it results that really every child learns to speak by an analytical-synthetic process. It starts with the elements of the word, and only by means of innumerable repetitions and attempts at imitation it succeeds in composing with its lips the entire word as a phonetic whole.

Therefore in my opinion, those oppose the natural process of learning to speak, who claim to teach the deaf-mute at a very early age to pronounce by repeating to him the entire word without first preparing his organs by means of analytical exercises, and without insisting on the correction of the elements pronounced.

As I have already observed, this is the negative method which they wish to apply in the kindergarten school of Philadelphia (Bala) and worse still upon which they wish to found a Normal School for the training of teachers.

In all this matter, there is, I think, a great misunderstanding. And in this idea I have been confirmed by a treatise by Miss Garrett which I have just read in order to give a more exact account of what she had said to me personally :

“Every one with whom a deaf child comes in contact should talk to it and encourage and aid it to articulate. Deaf babies begin to say *ma-ma-ma* just as hearing babies do, but as a rule, it is not encouraged in them;” she then adds : “if it were, and the child properly guided to further articulation, it would talk.” Ah! but there is one sole difficulty, whether the deaf child can be properly guided by the first one with whom it comes into contact, as certainly does happen to the normal hearing child, who listens long before it speaks, repeating then at first only the elements of the word heard, and of these elements only those in which the proper dynamic relations have been established between the various components of the mechanism of language. Now it is clear that this difficulty cannot be overcome without preparation, and without a systematic process of teaching.

From the observations and comparisons made in the various kindergarten schools and in the first classes of the special institutions, I can conclude that articulate speech is taught to American and English deaf children with the best results when the analyti-

cal method is used, and where they proceed in the same manner as in our oral schools.¹ That which is acquired more easily is the synthetic lip-reading, but this depends on the fact, already noted, that the English language is composed, at least two-thirds of it, of monosyllabic words, or of those which can be reduced to such in the pronunciation with a predominance of consonants. Hence the advantage of making the deaf understand early the practical value of their efforts in the oral instruction.

One can make every compound syllabic word assume the meaning of a normal word, independently from the way it is written.

It must be noticed in regard to writing, that in some schools the children learn simultaneously by lip-reading and writing, not only a vocabulary of nouns (beginning with the proper names of their school-fellows and relations and of the personnel of the school) but also quite a long list of familiar phrases and commands, warnings and judgments, which form the solid base of a linguistic patrimony. This advantage is reflected also in the acquisition of the spoken word, from the well-known fact of the association between the various sensorial images as stimulus and material of perception.

In other schools where they do not admit the importance of the elements of the word, they postpone the writing. They associate the entire word with the object, image, person and action, but not with its written form. And in this respect it happens to the deaf as to the uneducated hearing, who do not know how to write the words which they have had on their lips for many years. This, however, does not make any impression in an English speaking country, where every one must tell how he writes his name, or that of some one to whom he refers in conversation and

¹The English language has however special exigencies. Every instruction of the elements should be subordinated to a real and exact system of phonetic writing, in order that the pupil should accustom himself to translate the written word orally. This has not in fact an absolute value, as the pronunciation of vowels and consonants depends in a great measure upon their various positions in the different words. In some schools I have seen special tablets on the walls, to which the attention of the pupil was called in order to make him remember the phonetic value of certain combinations. All this is said in regard to the best organized oral schools.

who is not personally known by the person spoken to. And this which is said of proper names should be repeated for all the words heard for the first time, even by educated people. The reason of this lies in the arbitrariness of the pronunciation, and in the difference in pronunciation in the different mouths.

Before closing this paragraph I wish to allude briefly to another question which greatly interests the oral teacher. I mean that of the quality of the voice in the deaf who are taught to speak at a very early age.

I did believe, and theoretically speaking, there is reason to consider it true, that facility of vocalization and fluidity of pronunciation must stand in relation to the earliness of the instruction. Success in this should be still easier to attain where precision in the elements of the word is not insisted upon, and where one is satisfied with any mechanical imitation. It is enough if the child moves its lips and emits a sound no matter how indistinct, which impressed me as a laryngean mumbling. The teacher always approved of the result, and then sent the little one back to frolic with its mates, until it should come in its turn again to pronounce a *larva* of speech, which the teacher herself only understood by indulgence. This, to tell the truth, also happens in the beginning in those schools where they make use of all the noted manoeuvres of the oralists, the indication of the point of articulation, the position of the vocal organs and the adaptation of the various parts of the mouth. But as they try to seize the opportune moment for the natural education of the voice, it frequently happens that we hear some very clear voices which give hope for the future. At the first glance one naturally thinks that the kindergarten must offer the most favorable conditions :

1. For the naturalness of the voice.
2. For the fluidity of speech, which depends on its exercise and development when the vocal organs are in the highest degree flexible.

However in the later results of the teaching these advantages almost entirely disappear, and "the voice of the deaf" is a fatality for all, even before the change of voice which becomes a common disaster for the children who had a natural stimulus in

the traces of hearing remaining to them, as well as for those who began to speak at a very early age. So that in the course of instruction they cannot be distinguished from those who never had been to the kindergarten.

In conclusion, the early teaching of the oral method does not give those advantages which had been hoped for from theoretic reasons, in the physical and physiological conditions of the vocal organs. Hence the same differences between boys and girls, the same defects in the hypertrophic development of the larynx, the same exaggerations of facial mimic, as in the movement of the tongue and jaw in the production of sounds and words.

It is now believed, and also formerly it was believed by some of the colleagues, that these defects might be overcome by applying the following rules in the first teaching of speech :

1. Divert the attention of the child from the points of articulation, and above all, from the larynx.
2. Do not insist too long at one time upon the correction of certain sounds, and upon the precision of the single positions.
3. Be very parsimonious in the use of touch, directing the attention to the diaphragm rather than to the chest and to the throat, for regulating the breathing and the holding of the breath.

These are the rules which certainly should improve the work of the teacher of articulation; but they do not give as far as I have been able to observe, all the desired effect.

Based upon these rules we can therefore establish this general rule : "The less consciousness the deaf pupil has of his own movements, the less exaggerated and the more natural will his pronunciation be."

DEDICATION EXERCISES AT THE MILWAUKEE SCHOOL.

LAURA E. PETTAPIECE, MILWAUKEE, WISCONSIN.

April 8 and 9, 1903, are red letter dates in the calendar of the Milwaukee, Wis., School for the Deaf. They marked the formal opening and dedication of a new building, one of the handsomest and best equipped in the country.

The building comprises eight class rooms, a manual training room, a recitation and drawing room, the Principal's office, an assembly room having around its walls shelves to be raised and used as tables for the childrens' lunch, a teachers' rest room, a library, play-rooms, dining-room, kitchen and bath-room. The decorations and furnishings of many of the rooms were gifts of individuals. Some of the rooms are tinted a gray-green with dark green boards, others a light ecru with brown boards, the woodwork in all being white. The coloring throughout the building and the decorations generally were done under the supervision of Mr. George Niedeken, the young artist who planned and executed the beautiful mural paintings of the kindergarten room, the gift of Mr. Charles Pfister.

These paintings form a wide frieze around the room and represent scenes in Europe. Each contains one or more children. One is a scene on the coast of Brittany, another a German village. Four of the scenes are from the Park de Morceau, Paris. The latter and the German scene illustrate the effect of morning, afternoon and evening light, the setting sun and the after-glow. The room is further furnished with palms and ferns, a singing bird and an aquarium.

The Binner room, furnished by Mr. Oscar E. Binner as a memorial to his father, Paul Binner, first principal of the school, is an attractive one. The coloring is ecru for the walls with dark boards and a frieze of medallions in green and white, representing a mistletoe design. A number of casts and pictures, including a portrait of Paul Binner, are about the room, the idea

being to represent each country by a picture from its best known artist. The room is occupied by the highest grade.

Mr. William D. Sawyere decorated a room for the smaller children, using pictures of children. One by Dr. Wurdemann is similarly furnished. Mr. William Steinmeyer furnished the American room with pictures showing the progress the country has made from the time of its discovery to the present. The decorations of the room donated by Miss Alice Chapman consist of fine casts in bas-relief of some artistic masterpieces, among them the Della Robbia and Donatella cherubs, one of Raphael's madonnas and one of Michael Angelo's. Another room was the gift of Mr. I. Friedman, and another the gift of the Ladies' Auxiliary of the Phonological Institute. The furnishings of the office were partly provided by the city and selected by Miss Wettstein, principal of the school, and partly by the gift of Mrs. August Uihlein. The walls are ecru, the rug blue, the furniture, consisting of desk, chairs, table and document case, being of weathered oak. Growing ferns and lace curtains give the room a cosy as well as an artistic air. The teachers' rest-room was furnished by the alumni of the school. Besides those who furnished whole rooms, were many who contributed to the decorative fund. The entire building is profusely lighted both by gas and by electricity.

On the evening of April 8 the building was thrown open for public inspection and a reception, tendered by the Ladies' Auxiliary of the Phonological Institute, was held in the kindergarten room, Dr. Alexander Graham Bell of Washington, D. C., being the guest of honor. Among other out-of-town guests were Miss McCowen, Superintendent of the Chicago schools for the deaf, with several teachers, Miss Van Adestine of the Detroit school for the deaf, and four teachers, Miss Schaeffer, State Inspector of Wisconsin schools for deaf, Mr. Walker, Superintendent of the State Institution for the deaf of Wisconsin, and Mr. Cary, State Superintendent of Public Instruction, and a number of principals and teachers from schools for the deaf throughout the State.

At the close of the hour devoted to the reception the many guests repaired to the assembly room where the dedicatory exercises were held. They were opened by an address of wel-

come from Mr. H. O. Siefert, Superintendent of the City schools. Mr. J. A. Sheridan spoke in behalf of the Board of Directors of which he is president. Mr. C. P. Cary gave a short address in behalf of the State. There were also short addresses by Mr. Walker, Miss Schaeffer, Mr. Quin in behalf of friends in general, Mrs. J. M. Pereles for the Ladies' Auxiliary of the Phonological Institute, Miss Wettstein, Principal of the school; Mr. Carl Frieschman, organizer of the Phonological Institute, and Mr. R. C. Spencer, its President. The latter gave a brief history of the development of the Milwaukee Day School for the Deaf from the organization of the Phonological Institute in 1879, and the opening of the first day school in 1883, with Mr. Paul Binner as teacher with eight pupils in one little room, to the present school with nine teachers and its handsome building under the principalship of Miss Wettstein.

Following this was the address of the evening, by Dr. Bell, who came to Wisconsin in 1885 to advocate the passage of the bill establishing day schools with state aid for instruction by the oral or German method. Then he came in response to the invitation of the Governor of the State. Now he came on the invitation of the Board of Education.

Mr. August F. Mueller, Chairman of the Committee on the School for the Deaf and President of the Parents' Association, introduced the speakers.

Dr. Bell traced the development of day schools for the deaf, a movement in which Wisconsin was the pioneer, to the present time.

"The day school movement is growing all over the West," said Dr. Bell. "You have not yet touched us very much in the east. I wish you would. In New York State there are eight large institutions but not one day school. At first it was believed necessary, in order to educate the deaf, to take them away from their homes and let them associate only with those similarly afflicted. This has been proven a wrong theory. The progress in teaching is based on the theory that the child must be taught so that he can go into the world at large to associate with hearing and speaking people and to be one of them. The place for the deaf is with the hearing. The ideal arrangement for schools

for the deaf is to have them additions to the hearing schools. Small classes for deaf children and much contact with hearing children is the best plan to follow.

“The ideal school for a deaf child is a school with only one child in it. The highest success in the teaching of the deaf has been reached by individual instruction.”

On April 9th the school kept open house all day. Exemplifications of the methods were given in the various class rooms, and games and fancy drills in the assembly room by the children to demonstrate the rhythm work. There were also short addresses by graduates of the school. In the manual training room was an exhibit of the handiwork of the children in drawing, sewing, weaving, carving, pyrography and carpentry.

In the evening a banquet was held in the assembly room with nearly one hundred guests present.

This was a time of celebration and congratulation for the work accomplished. Telegrams and letters of congratulation were received from many friends interested in the work, among which were those from Senator Mills, Superintendent Martindale of the City Schools of Detroit ; Dr. Wilmarth, Superintendent of the State School for Feeble-Minded Children, Miss Sarah Fuller, Mr. Currier, Dr. Gallaudet, and Miss Barry.

The president of the local school board presided as toastmaster. The toasts, which were interspersed with music, were responded to by Dr. Bell, by the Superintendent of Public Instruction, the Superintendent of the State Institution, the Superintendent of the City Schools, the Principal of the Detroit School, the Principal of the Eau Claire School, the President of the State Normal School, Supervisor of the Chicago Schools for the Deaf, members of the Phonological Institute, Miss Wettstein and others, including Mrs. Paul Binner. Mrs. Binner said : “This is a great growth from the little school started by Mr. Binner twenty years ago. I want to thank you from the bottom of my heart, as I must speak for him. My only regret is that he is not here. But the work is nobly carried on by others, especially by Miss Wettstein, who was Mr. Binner’s first pupil and also his first assistant teacher. It was his request that she carry on this work and she has done so with the greatest success.”



THE FINNISH SCHOOLS.

EDITOR THE ASSOCIATION REVIEW:

Among the professional visitors from abroad during the present year, Miss Emilia M. Serenius, late principal of one of the more recent schools for the deaf, established in Northern Finland, of which at present she is matron and head instructress, located at Uleaborg, a city of some 20,000 inhabitants, deserves some special notice; both on account of the circumstances involved in her visiting American schools during a period when they may be seen at their best, and the thorough manner in which she set about doing the work she came for. As an eminently capable and practical instructor, she did not content herself merely in paying a flying visit to schools generally, but selected certain typical ones where it was believed she might gain knowledge in special lines she was desirous of studying. To each of these, since her arrival in America, she has devoted more or less time, extending in some instances even to three weeks, with a view to familiarizing herself with every detail she thought might prove of advantage to her own, and other schools of Finland.

Primarily, it is of exceptional interest to observe the far-sighted educational policy the Finnish Government pursues in securing the best possible instructors for the deaf, and then inspires them annually with increased interest personally to achieve the broadest possible knowledge of what is being done in their special line of work by the most advanced of nations. With this in view, the Finnish Government at present, is not content to exact that every teacher of the deaf for its eight schools shall first secure a certificate qualifying him or her to teach in the public schools, but previous to appointment he must have attended some one or more schools for the deaf two years, in theoretical studies and practical class training. To facilitate this, the government sets apart annually three thousand marks to be propor-

tionally awarded to such candidates for teacherships as apply for the same, and prove themselves deserving thereof.

Furthermore, the salaries of teachers of the deaf in Finland, considering the economical manner of living, which exists there, may be termed, if not liberal, quite fair, a lady teacher starting with nineteen hundred marks, and a male teacher, twenty-five hundred marks per annum, with an increase of ten per cent. for every five years of satisfactory service rendered, until this reaches thirty years of service, when they are retired on full pay. But the peculiar feature to which I would here invite special attention, is the further incentive which the Finnish Government gives its teachers to attain the highest possible standard, in the fact that it now annually, and has for a number of years past, set apart three thousand marks as stipends to be awarded to teachers desirous of going abroad for several months during school terms, their regular salary remaining unimpaired, provided they supply at their own expense, qualified and acceptable substitutes. This stipend is apportioned every year among three or more teachers in sums according to the locality of the schools the applicants indicate they wish to visit. Thus Miss Serenius, who several years ago, visited in like manner, typical schools in Sweden, Denmark and Germany, this year elected to visit certain American schools, and for that purpose, was awarded the larger share of the three thousand marks appropriated for the purpose. In the case of two other instructors who elected to visit schools in Sweden and Denmark, the stipend awarded to them was far less, but ample to cover their expenses, whereas in that of Miss Serenius, she, owing to the great distance and increased expense of American travel, may have to supplement somewhat from private funds. The State Board of Education in Helsingfors, the capitol, exercises through its exceptionally efficient inspector General of Schools for the Deaf, Mr. Walther Forsius, entire supervision of the instruction of the deaf, including the disbursements of the appropriations made in behalf of these schools, by the legislative branch of the Finnish government. To it also must be transmitted all reports of schools and especially those exacted of teachers availing themselves of the stipend above indicated.

Another feature of the methods pursued in the instruction of the Finnish deaf, and which it would seem experience approves as correct, is the fact that all young children enrolled in the primary schools for the deaf enter them as boarders, and of the eight years school term remain there from two to four years, when they are put out to board, singly or in groups of two and three with suitable families, where it is held they have better opportunities to learn lip-reading from a variety of people than at the school, and thus far without in any manner impairing their speech or the earlier discipline inculcated by the school.

In conclusion, as to the methods employed in the instruction of the deaf of Finland, it may be briefly stated that in the First Division of deaf enrolled, are children from eight to twelve years of age. These are all instructed orally. The Second Division embraces backward children found after a year's trial unsuitable to be orally instructed, and uninstructed youths and girls from twelve to fourteen years of age. These are taught solely by writing and the manual alphabet. The Third Division embraces absolutely dull and uninstructed adult deaf of any age, who are then instructed by gestures, signs or in any possible other manner.

JOHN HITZ,
Superintendent of the Volta Bureau.

May 18, 1903.

SOME DON'TS TO BE OBSERVED IN TEACHING SPEECH TO THE DEAF.¹

SARAH JORDAN MONRO, HORACE MANN SCHOOL, BOSTON, MASS.

Letters of inquiry which I have received indicate gratifying interest in the statement—"Don't allow a pupil to feel the vibration of the voice in the throat."

The practice, so common among teachers of deaf persons, of centering the thoughts upon the vibration of the voice at the vocal bands is largely responsible for the disagreeable quality noticeable in many voices.

Resonance and purity of tone are not possible under conditions which exist when this plan is followed.

The best teachers of those who hear have not, for many years, worked directly upon the vocal bands and surely we ought not to follow with the deaf, whose speech and voice organs are like those of hearing persons, a course which has long since been discarded.

Those who teach speech to the deaf have been longer in appreciating the fact that they should seek help in their work from teachers of those who hear, than have instructors in other departments of study.

The "Don'ts" which I have to present for this issue of THE REVIEW are the following:—

DON'T fail to distinguish between a true and a false nasal vibration.

DON'T teach a pupil to use his voice until he has gained control of his tongue in "the first position."

DON'T let a pupil feel the vibration of the voice in the chin nor upon the teeth in giving the sound of *z* nor of the vocalized *th*.

DON'T require too much voice in giving the sound of *z* nor of vocalized *th*.

DON'T neglect the recoil in the consonants.

DON'T fail to recognize the value of rhythm in teaching speech to the deaf.

¹This is the third article of a series, the first of which appeared in the February, 1903, REVIEW.

REVIEWS.

X Annual Report of the Board of Directors of the Pennsylvania Institution for the Deaf and Dumb, Mt. Airy, Philadelphia, 1903.

The report of President Hutchinson shows a total enrollment during the year of 562 pupils, an increase of 20 over last year. The number in attendance at the time of the report was 502. The expenditure per capita was \$279.60, or \$19.60 for each pupil in excess of the state appropriation.

The report of the Superintendent, Dr. A. L. E. Crouter, to the Board of Directors, contains the usual amount of interesting information about the pupils and the school. We gather from a table giving the causes of deafness that 232 pupils were born deaf, this number being exactly divided between the sexes. Numerous improvements have been made about the buildings and grounds, mostly the work of the boys who are learning carpentry, painting, brick-laying, etc. There has been a decided improvement in the health of the pupils and in the intellectual work, consequent on the greater attention paid to physical training. Regarding speech teaching, Dr. Crouter says :

“Excepting in three classes manually (by means of the manual alphabet and writing) taught, speech methods were observed in individual and class work throughout the whole school—in class-room, in workshop, in the gymnasium, and in all chapel exercises. To teach speech as a sort of vocal accomplishment is of no practical value to the deaf, it is simply time wasted. It must be put to practical use not only as a means of instruction but for purposes of intercourse between officers, teachers and pupils, and among the pupils themselves. Without such use, good speech and good lip-reading are impossible. With the introduction of the best methods of speech-teaching, carefully systematized at every stage of the work, there has been a very noticeable advance made in these two branches during the past two years. This has been accomplished by sheer hard work on the

part of the instructors. There has been no neglect of other branches taught ; on the contrary, they have been pursued with better results. Better speech and better lip-reading have proven a decided aid to better language work, better work in arithmetic, and better results in all branches of study taken during the course. With us as a school speech-work and language-work may be said to go hand in hand, the former slightly leading, the latter a close follower. The practical value of speech and lip-reading is to be found at the homes of the pupils where they have daily intercourse with relatives and friends. So tested the speech of our pupils is found to be of almost inestimable value. Parents, relatives and friends have testified in the most emphatic manner as to the ease and readiness with which they are able to communicate with their children upon all topics of daily intercourse. This is the crucial test of our work in speech, not the ability to pronounce some selected list of words, seldom or never used, nor to catch from the lips some test line or paragraph, trials that, in many instances, would be sufficient to puzzle the average hearing child. Said an active young business man, a former pupil of the school, "I am carrying on a business involving thousands of dollars each year. I always rely upon my speech and lip-reading in my business transactions. I never use paper and pencil for purposes of communication, and do not believe one in ten of my patrons know that I am deaf."

American Annals of the Deaf, Washington, D. C., May, 1903.

The contents of this number are a sketch of the late Harvey William Milligan, by Edward P. Cleary, of Jacksonville, Ill.; "Some Lessons in Auricular Training," by Anna R. Camp, of Chicago, recounting experiments in training the hearing of a partly deaf girl; "The Note Book," by Warren Robinson, of Delavan, Wis., an adverse criticism of the practice of having pupils copy into books things they are taught instead of mastering them by a mental process; "The Correlation of History and Language," by Laura MacDill, of Council Bluffs, Iowa; "Mental Characteristics of Pupils," by James L. Smith, of Faribault, Minn., the third article of a series that has been commented upon in previous numbers of the REVIEW : memory, the perceptive faculty, and the logical faculty are investigated in a practical manner and discussed interestingly ; notices of the postpone-

ment of the meeting of the Conference of Superintendents and Principals from the coming summer to 1905, of the Annual Meeting of the American Association to Promote the Teaching of Speech to the Deaf, and of the Meeting of the Department of Special Education, N. E. A. Among the Notices of Publications we find interesting reviews the Annual Report of the Wisconsin Inspector of Schools, "A Contribution to the History of the Instruction of the Deaf," by A. Regnard, Paris, and Helen Keller's "The Story of My Life." The last is from the pen of Weston Jenkins, and is a very scholarly and interesting article, deserving of a more prominent place in the magazine. Among the School Notes is an appreciative sketch of the late Joseph C. Gordon, from which we take the following admirable estimate of his character :

"Dr. Gordon had genial manners and an attractive personality, the fruit of an amiable disposition. He made friends readily, and some of his friendships were strong and lasting. He was a clear thinker, a ready writer, a forcible speaker, a successful teacher, an efficient superintendent, a public-spirited citizen, a warm-hearted friend, a true disciple of the Master, always ready to deny himself for the sake of others. His death leaves a vacant place in the profession and in the community that cannot easily be filled."

L'Educazione Dei Sordmuti [The Education of the Deaf]
A Monthly Magazine edited by G. Ferreri. Third Series.
Volume XXVI of the Collection.

January, 1903.—"On the Vocabulary of Our Pupils," an article by Prof. Ferreri, in which he demonstrates the necessity of the repetition of words and phrases in our schools. He recommends us to give the preference to simple and common language because the deaf as well as hearing persons do not use the complicated sentences of philosophical demonstration in the daily contingencies of life. I do not mean by this, he concludes, that we must make a choice of words and phrases which are philosophically and grammatically easier. This would lead the modern school back to the jargon of the ancient school, which unfortunately transmitted to us, and still preserves in many of our

schools, the laconism of expression, and the ridiculous syntax of the mimic sentences. We must not, however, choose the language to be taught, but only pay the greatest attention not to deviate from the natural process of learning, which is offered to us by the hearing child in his first endeavors to speak with those about him.

A long report is dedicated to the recent study of Prof. Bezold in regard to the traces of hearing which remain to the deaf, and their utilization for aural teaching.

Among the miscellaneous news and comments, we have read a good and favorable report upon the Sarah Fuller home for little deaf children in West Medford.

February,—A quite unfavorable judgment is given of the new expedient for the teaching of the deaf recently proposed by G. Forchhammer of Nyborg, about which we have already published in the paper read at the third meeting of the Danish teachers of the deaf. (See *THE ASSOCIATION REVIEW* of last December). A large space is devoted to the bibliographical examination of the more recent publications. A special study of the International Reports of the Schools for the Deaf made to the Volta Bureau shows how much the American work is appreciated in Europe. Mr. Ferreri is giving to the readers of the *Educazione* all useful information in regard to the educational work of the deaf in the world. In every number of the *Italian Review* we read the contents of the American and European Reviews.

March—A critical study is dedicated to the report of Miss Schmidt upon her visit to the principal institutions for the deaf in Italy, translated from the German by Dr. H. Jacobson and published in our Number of December. In order to demonstrate the value of the contribution of Dr. John Wallis to the first teaching of the deaf in Europe, Mr. Ferreri takes in close examination the pamphlet of M. Regnard of Paris, who in a recent study denied any importance whatever to the work of the famous mathematician of Oxford. Mr. Ferreri begins the publication of some letters of Dr. Wallis which have been quite unknown in our literature. Certainly these letters have never been translated into Italian, neither have they been collected together. The

translation of the first half of the XI Chapter of Bezold's work is the best means to show the practical process followed by Bezold in order to measure and appreciate the traces of hearing existing in the 456 deaf examined by him.

Among the "News and Comments" we find many interesting things, and we think it will give pleasure to our readers to find in another part of this number, the translation of one of them about "an Acoustic Problem."

Organ der Taubstummen-Anstalten in Deutschland [Organ of the deaf-mute institutions of Germany] 47th year, Nos. 1 and 2, Friedberg, Germany, January and February, 1903.

"Art Should Play a More Important Part in the Education of Our Children, Also of Our Deaf-mute Children," by H. Hoffmann. A movement, started at Hamburg, to educate children more than has been done hitherto to the appreciation of the beautiful in art and nature, makes itself felt in educational circles in Germany. The main object appears to be to limit the education which is principally given for acquiring that knowledge which aims at the merely useful, and create an enthusiasm for the ideal, and thus, by influencing the young generation, to lift humanity from mere trivial and material views to a true appreciation of the beautiful. Not only can this be done by instruction in drawing, painting, singing, and literature, but also by making the school-room attractive, and by decorating its walls with reproductions of well known paintings—which some German publishing houses have of recent years published in excellent quality and at cheap prices. The various associations of German artists have furnished a long series of pictures of religious and historical subjects, landscapes, views of cities, illustrations of well known poems, so that there is the greatest variety to choose from. In answer to the question, "What position shall the education of the deaf take relative to this artistic movement in education?" it must be said that, as a general rule, the deaf here have a very lively appreciation of the beautiful. Since instruction in singing and the recitation of choice pieces of the classic literature, is with them out of the question, the object should be to awaken

in the deaf a sense for form and color, to accustom the eyes to distinguish what is truly beautiful, and to enable the hand to produce beautiful objects. More even than with hearing children, it will be important to tastefully arrange and decorate the recitation and dwelling rooms of deaf children. Some of the German institutions for the deaf with the bare walls of their rooms, give to the visitor the impression of a poorhouse rather than a school, not because there is no money to acquire objects of art, but simply because the idea prevailing in the last generation, that the main object of the school is merely to teach the children something useful, still prevails to a large extent, to the exclusion of more idealisms. The useful, of course, is not to be neglected, but it can easily go hand in hand with the aim to awaken in the children, at an early age, a true appreciation of the beautiful.

“Report of the Conference of the Directors and Teachers of the Institutions for the Deaf in the Prussian Province of Saxony, held at Halle, November 14th and 18th, 1902.” The following subjects were discussed: The experience hitherto gained in separating the deaf scholars according to their mental capacity; the most suitable age for receiving deaf scholars at the institution ; is it to be recommended to apprentice deaf scholars who have finished their course, in the place where the institution is located?—A practical result was the foundation of a “Deaf-mute Aid Society for the Province of Saxony.” The object of this aid society will be to aid needy deaf, by giving pecuniary assistance to particularly needy and worthy persons, by establishing employment bureaus for the deaf in all the larger cities, by furnishing needy deaf with tools and material to establish themselves in business, by furnishing sewing machines to poor deaf seamstresses, and finally by establishing a home for aged and feeble deaf.

“How and in What Measure Can and Should We in Teaching the Deaf to Speak, Follow Hill’s Principle : Develop the Speech in the Deaf Child just as Life Produces Speech in the Hearing Child ?” An address delivered at the December conference of the teachers of the Temesvar (Hungary) institution, by Josf Roboz. We can but briefly touch on the main points of this interesting address. I. By the “pure German method” we

understand the method of instruction by which the deaf, to the entire exclusion of the mimic speech, are taught in and by means of the spoken language, in such a manner that every new word, every new expression is exclusively taught by speech, the scholars read the words from the lips of the teachers, and this is followed by writing and reading. 2. Hill's principle, however, must not be taken in a literal sense. Hill himself did not do this, and his text books for the lower classes prove sufficiently that the deaf cannot be taught to speak in the same manner as a hearing child acquires speech in the home and family circle. 3. Hill's principle can, therefore, only be taken in this sense that, as the hearing child learns to speak words in connection with the objects which it sees, so the deaf child shall be given such a direct instruction in speech as is based on objects which it sees or actions which it witnesses. 4. Hill's principle is strongly opposed to the instruction of the deaf child in the understanding and use of the forms of speech as given in a grammar. With the deaf the form must be directly connected with the object for which it stands. 5. Hill's efforts and those of his followers are, therefore, entirely misunderstood by those who call that method a higher development of Hill's system, by which the deaf during the first four years of schooling are to practice speech only by conversation on occasional subjects. This method, justly called the "imitative method," must on the contrary be termed a retrogression from Hill's method. 6. If we desire to further develop the method of Hill and Vatter in accordance with their principles, we must employ a constructive method of instruction in speech which, taking into account the special defect of the deaf, and the physical and psychological laws of speech, presents, according to a firmly fixed gradual course, word for word, expression for expression, form for form, so that the preceding leads clearly to an understanding of the following. 7. The constructive method, which is the only one which meets the requirements of the pure German method, requires that in instruction justice should be done to every side of the formation of language. i. e., even in the lower to every class (second year) the instruction in speech should be arranged as follows: *a*, instruction in mechanical speaking; *b*, object lessons; *c*, instruc-

tion in reading; *d*, instruction in language (grammatically); *e*, written exercises; *f*, conversational language. 8. The constructive method is much better adapted to the nature and special defect of the deaf than the imitative or conversational method. It offers to the deaf a firm support by taking in the the deaf child; and never loses sight of the fact that the little deaf child has, so to speak, no sense whatever for the forms of speech, that his sense of speech develops only after many years' instruction, but never reaches the strength which we find in hearing children. 9. In using the term "conversational method" it should be borne in mind that the constructive method by no manner of means entirely excludes the catechetical form of instruction (questions and answers), but that it will be advantageously employed in the lower grades. 10. The conditions of successful instruction by the pure German method are the following: *a*, small institutions, no huge boarding schools; *d*, a special teacher for every class; *c*, no more than eight to ten scholars in the lower and ten to twelve in the higher classes; *d*, grading of the scholars according to their capacity; eliminate the mentally backward; *e*, special readers and text books for the deaf; *f*, thorough education of the teachers for their special calling; *g*, strict discipline in the institutions; conscientious and persistent work by the teachers.

"The Life of Johann Hinrich Kröger," by K. Finckh: Kröger died in February, 1903, 95 years old, and 47 years of his life were devoted to the instruction and care of the deaf at the institution in the city of Schleswig. Kröger never wrote down his recollections of the olden times, although they would make an interesting volume, but communicated them orally to his many friends, and Mr. Finckh's object in this article is to save from oblivion some of the reminiscences of this Nestor of deaf-mute instruction. In the "good old times" the scholars had no vacation whatever. The consequence was that frequently children did not see their parents for years, only when the children were to be confirmed the parents came to witness the solemn ceremony, and often a child would blush and incredulously shake his head when told that the old man in his simple coat and with his bony hands was his father. On the other hand it happened more than

once when a father came to take his son home, after the end of his schooling, he took the wrong boy and did not discover the mistake until the boy reached the old homestead and exhibited utter indifference to his mother, brothers and sisters, when the father had to take him back to the institution and finally discover his son after considerable search. A new scholar, already twenty years old, entered the institution with a big pipe in his mouth, and had become so accustomed to smoking that he had to be allowed to smoke his pipe during recitation hours and whenever he pleased. For two years the institution harbored a pretended deaf boy. Although suspicions as to his deafness began to arise, it seemed impossible to obtain convincing proof. So, one day one of the teachers, accompanied by a servant, took a boat and asked the pretended deaf boy to take a sail with them on the Schlei—the narrow arm of the sea on which the city of Schleswig is situated. When arrived at a considerable distance from the shore, the teacher whispered audibly to the servant, “Now we will throw that fellow in the water, nobody sees us, and nobody will care!” when the boy uttered a piercing cry, and begged them to spare him. At one time the scholars had been asked to write compositions on the subjects of their dreams. One of them had produced an excellent and highly poetical essay so that the teachers, in solemn conclave, thought they had discovered a true genius among their scholars and proposed that the essay should be published in the “Organ” under the title “The Mental Product of a Deaf Child,” when fortunately it was discovered that the little scamp had literally copied the essay from a dream book. Many of the scholars often proved refractory, and owing to the lack of proper discipline nothing could be done with them. One of the scholars was so bad that when King Frederick VI. of Denmark (till the year 1864 Schleswig belonged to Denmark) visited the institution, this scholar was locked up in a dark out-house, for fear that he would make a scene. With all his sense of humor, Kröger was a conscientious, faithful and most efficient teacher of the deaf, and much of the excellence of the well known Schleswig institution is due to his earnest and untiring labors. He lived to see the day when the so-called “good old times” had given way to a more rational method of education, and some

years before his death he received the Prussian order of the "Crown" in acknowledgment of his long and eminent services.

"Ragnhild Kaata, the Deaf and Blind Scholar of Elios H. Hoffgaard": Ragnhild Kaata was born May 23rd, 1873, among the mountains of Norway, in Vestre Slidre, as the child of poor peasants; and was a healthy and happy child till at the age of three she had the scarlet fever, in such a violent form that the physicians gave her up. As by a miracle she recovered; but alas, when restored to health, she was found to be deaf and blind and deprived of the sense of smell. Thus secluded from the outer world, she spent eleven years of her childhood like a prisoner in his cell, in which no ray of light and no sound enters. Her only recreation was to rock her little brothers and sisters to sleep. When she had reached the age of 16 some well disposed people became aware of her condition, and through the press awakened public interest in her case, so that a considerable sum of money—amongst the rest 3000 Kroner from America—was collected, and she was enabled to enter the institution for the deaf at Hamar in January, 1888. At that time she seemed hardly like a human being. For days she sat in her place stolidly and without taking the slightest interest in her surroundings: only every now and then she uttered a sound resembling a deep sigh. Whenever any one approached her, she acted like a wild animal, stamped the floor with her feet, roared and scratched. She was, moreover, suffering from such a violent and offensive catarrh of the eyes, nose and ears, as to render her isolation necessary from sanitary reasons. After a few months of medical treatment, however, she was in a condition that instruction could begin. The speech-method had been introduced in the Hamar institution, and Mr. Hoffgaard says: "I therefore determined to instruct her according to that method. I must confess that I had considerable misgivings as to the success of my experiment. At first Ragnhild would not allow any one to touch her mouth; on the other hand she was disposed to feel the mouth of others, to ascertain whether they were friendly or hostile. In the beginning I took her into the class and let her feel my lips. She was also allowed to feel the lips of other children, to give a light smack to one, and pull the hair of another, which evidently seemed to

afford her pleasure. Gradually she permitted me to touch her lips. Instruction in articulation could now commence. On the whole I followed exactly the same method as that observed with seeing deaf. Of course the positions of the organs had to be ascertained by touch, and the entire instruction shaped in such a manner as to make her believe that it was only play. For, as soon as she noticed a more serious endeavor, she was unwilling to proceed. She sat down and would not do a thing. Whenever I approached her, she again became like a wild animal. I had to remain the companion of her play. We blew out a candle, we blew little paper balls by our breath along the floor, and crept after them on all fours to see who would first find the ball. We breathed with open mouth for the letters h, f and s, and in between we danced. It was a strange instruction, but no one saw us, and for the time being we were both blind. After Ragnhild had learned to feel the sounds from the lips and to pronounce them, I taught her to read and write. We wrote with chalk, with lead pencils, or with the finger on the table, on the blackboard or in the hand. In reading we at first used letters cut from paste board, and pasted on wood, so that they could be put together to form syllables and words. This method, however, took too much time; and I finally conceived the idea to write raised letters and words with a mixture of varnish and soot, which dried quickly and immediately became as hard as stone. As a pen we used a tin tube of the size of a thick short penholder, pointed at the end, so that in writing the liquid flowed out like a thin thread. Much was gained thereby, and soon Ragnhild had acquired a little library of words and short sentences. I shall never forget the hour when Ragnhild gathered the meaning of some words. I had selected the names of three objects which we had before us. These I repeated continually for several days. At last it dawned upon her that the words signified these objects. Beside herself with joy, she ran out to the teachers and the servants. All had to feel her lips, to show that now she could speak and tell the name of this and that object. She again came to me, took my arm, and led me hither and thither. She had to feel my lip to ascertain how the names for the various objects were pronounced; and she was so eager that she would

hardly take time to grasp one object, before she passed to another. Some words were long, others short, some had an "a," others an "i" and this amused and interested her in the highest degree. From that day on I had no more difficulty, and never was there a scholar so eager to learn as Ragnhild. It was also a very happy hour for Ragnhild, when it became clear to her that by writing she could communicate her thoughts to absent persons. She wrote with a lead pencil on common writing paper which had been fastened to a ribbed slate so that she could feel the ribs through the paper. She also read and wrote common print, the latter by means of a printing machine, which I had caused to be manufactured for her—and which, by the way, gained a prize at the Copenhagen Exposition. Ragnhild did not receive much instruction—during the first year only an hour a day. My many other duties did not permit me to devote more time to her. But, nevertheless, she made rapid progress, more rapid even than most seeing deaf. When Mrs. Lampson, of Boston, visited Ragnhild during the summer of 1889, she could already speak a few sentences, and when during the winter of 1889-1890 the Crown Prince of Sweden came to see her, she was able to carry on a short conversation with him. When the Crown Prince told her that he would grant her pecuniary assistance, she exclaimed, beaming with joy : "The Crown Prince is very kind. I shall buy a cow, and shall make my parents a present of a big cow !" As Ragnhild's instruction progressed, a vast change came over her entire being. Persons who had not seen her for some time could hardly recognize her. The dull Ragnhild, without interest in anything around her, had become a lively child, eager to learn. She was, so to speak, constantly making voyages of discovery, talking with the teachers, the servants, her fellow scholars and with guests. She had acquired a knowledge of everything pertaining to the house, yard and garden, as few of the other scholars. In between she would sit in her rocking chair and talk to herself—this person had done so and so, and another had said this or that; then she would burst out into a happy laughter. She had a truly humorous vein. If time hung too heavy on her hands, she would open one of our doors and make some jocose remark. The next moment she would

laughingly run away, if she found that we were after her. The possibility of speaking had made her happy. As her stock of words increased, the inarticulate sounds which deaf-mutes often utter when excited, disappeared entirely. The means for Ragnhild's instruction were not very large, and only one teacher, and he only part of the time could devote his efforts to her. And as she proved to be talented, and had to be classed among those scholars who, after the articulation instruction has been finished, are easily guided further, her instruction was entrusted to younger teachers. In the year 1897 she was confirmed in the Lutheran church. It now appears as if she was desirous of dividing her time between her home and her friends at the institution. Now, she has become endowed with speech, she begins to feel a little independent of us, her teachers, for which—I must confess it—we are sorry, for we all like her. The whole world is now open to her. Lively and full of humor, she likes to be the center of a little circle, of which she is the queen. It is a pleasure to see how she converses even with children four or five years old. By Ragnhild's case it has been proved for the first time that the blind-deaf can be successfully instructed by the speech method, and that solely by the aid of touch they can learn to speak and read the words of others from their lips. The speech-method appears to be easy for the blind deaf, easier even than for seeing deaf. The blind can by the touch feel the positions of the organs of speech which the seeing deaf notice with the eye. He can likewise feel the sounds which are formed farther back in the mouth, e. g., "g" and "k" and distinguish the sounds which to the eye assume about the same position of the organ, e. g., m, b, p, or n, d, t, and e, and all this is done by the admirable sense of touch, by lightly placing two fingers on the lower lip of the speaker, whilst the thumb rests on the throat. If the conditions of the mouth are less favorable, three or four fingers are placed against the upper lip, whilst the thumb retains its position."

Revue Generale de l'enseignement des Sourds-Muets
[General Review of Deaf-mute Education], 4th year, Nos.
7 and 8, Paris, January and February, 1903.

“Essay on the Conditions Which Should Assure Success in Teaching a Deaf Child to Speak,” by B. Thallon (first and second articles): Mr. Thallon divides these conditions into two groups: essential conditions and conditions of secondary importance. The essential conditions are the following: First, the necessity for the teacher to draw from the knowledge which science possesses relative to the formation of sounds all the deductions that can be drawn therefrom, and to rigorously apply the principles gained from this source. Second, the necessity to employ for instruction in speech methods which conform to these principles. Among the conditions of secondary importance Mr. Thallon mentions those which relate, first to the duration of the course of articulation; second, to the number of scholars to be entrusted to each teacher; third, to the manner of dividing the scholars among the different classes. Under the head of “essential conditions” Mr. Thallon gives further details. The actions which the deaf child must learn to execute in order to become a speaking child have for their object: First, the emission of sounds; Second, to give the proper accent to each vowel and consonant; Third, the combination of several phonetic elements to form a syllable; Fourth, the intonation—First the voice: the laryngean sound or the voice contributes to the formation of all phonetic elements. It would, therefore, be a grave mistake to endeavor to make a deaf person speak without enabling him to produce the laryngean sound correctly, easily and without hesitation. The various grades through which the scholar will have to pass are naturally the following: he must learn to use the laryngean sound, to regulate the duration of the sound, to vary the intensity and the height and depth of the sound, to produce the laryngean murmur which accompanies most consonants. Second, the vowels and consonants: to teach the deaf child to produce all the vowels and consonants of our language is the most important and at the same time the most difficult portion of the task of a teacher of the deaf. The mechanism of all articulate sounds may be traced to the action of

the two glottis, the one the laryngean which produces the voice, the other the buccal, susceptible of being moved, which produces the difference between vowels and consonants. In order that the vowel or consonant be issued correctly and purely, it is first of all necessary that each of the glottis, considered by itself, should act in the proper manner, and in the second place that their action should be suitably coordinate. To sum up : success of teaching the deaf to speak depends upon having the teaching of the vowels and consonants comply with the following conditions :

The scholar in pronouncing each vowel should accompany it by what Mr. Thallon terms " the glottal explosion;" he should know how to regulate at will the duration, intensity and (to a very limited extent) the height and depth of the sound ; he must know how to produce exactly and without the least hesitation the laryngean murmur which accompanies the sonorous consonants; he must reproduce the various forms which are produced by the buccal glottis with the greatest possible approximation, and avoid to exaggerate the movements of the teeth and the force with which the sounds are issued; and finally, he must know how to coordinate the action of the laryngean and buccal glottis.

As usual each number of the "Revue" is embellished by an engraving. The January number contains a portrait of Rochambroise-Augustin Bebian, who did much to further the education of the deaf in France. He was born in 1789 on the Island of Guadeloupe, French West Indies. After having successfully finished his studies at the Lyceum Charlemagne, and the Royal Institution for the deaf at Paris, he soon entered that institution as a teacher, and was finally appointed censor of studies, a most important post, as its duties implied the supervision, modification and improvement of the course of studies. Owing to failing health he returned to Guadeloupe in 1834 and died there in 1839. Bebian's influence makes itself still felt in France through the works which he published, the most important of which are "Eulogy of the Abbe de l'Epee" (1819) which gained the prize of the Royal Academy of Sciences, and particularly his "Manual of Practical Instruction of the Deaf" (1829). The February number gives a portrait, accompanied by a short bio-

graphy of Marie-Joseph Baron de Gerando, born at Lyon in 1772 and died in 1842. His whole life work was devoted to the interests of the deaf, and his influence made itself more particularly felt by his publications. He published more than twenty-five volumes, the most important of which is "The Education of the Deaf-Mutes Which are Born Deaf" (two vols.)

Nordisk Tidskrift for Dofstumskolan [Scandinavian Journal of Deaf mute Education,], Nos. 1, 2 and 3, 1903, Goteborg, Sweden.

These numbers contain short biographies, with portraits, of two prominent Swedish teachers of the deaf: Jehubba Blomkvist, Director of the deaf-mute institution of the Province of Orebro and Varmland. Mr. Blomkvist is an ardent advocate of the speech-method, and is of opinion that it should be employed with all deaf who possess normal intelligence and normal organs of sight and speech, i. e., 80 to 90 per cent. of all the deaf; provided, however, that instruction in articulation is imparted with such care, discretion and energy that the speech really becomes the means of communication between the deaf and his daily companions.

A. J. Hagstrom, one of the most efficient and careful teachers of the deaf which Sweden has produced, will soon be able to look back on thirty years' work in the calling to which he has devoted all his energy. He is Director of the School at Hernösand, and all who have seen him among his scholars testify that it is a true pleasure to witness his manner of imparting instruction, which is not only interesting but infuses true enthusiasm in the scholars for the subjects taught. Mr. Hagström is a many sided man, and last but not least it should be stated that he possesses artistic talents both in drawing and music. Sweden has produced many able and talented teachers of the deaf, but Blomkvist and Hagström stand in the front rank.

Two articles treat of the question of lip reading, the one by Johansen, Director of the Institution at Fredericia, and the other by Forchhammer, Director of the Nyborg Institution, both in Denmark. Forchhammer favors a combined system which he terms the "mouth-hand" system, whilst Johansen advocates the

speech method pure and simple. Johansen sums up his views used by nearly all persons when conversing with the deaf, it should form the basis of our instruction. 2. Systematic reading exercises without any artificial aid should be introduced in the schools for the deaf from the lowest to the highest class. Forchhammer, on the other hand, says : "Use lip-reading for everything which is so easy and plain that it can be read at once. Use the "mouth-hand" system for everything which (at least momentarily) is so new and difficult that it could not be read off at once. Mr. Forchhammer adds: "When, on various occasions, I have felt it my duty to point out the difficulties of lip-reading, this was not done to discourage people from lip-reading, but simply to show the necessity of using, by the side of lip-reading, concrete means of communication. Lip-reading will certainly not suffer thereby."

El Sordomuto Argentino [The Argentine Deaf-mute], a monthly review, Buenos Ayres, 1903.

This number contains a review of the work done during the scholastic year 1902, and gives an account of the examinations held at the various Argentine schools for the deaf, as best calculated to give an idea of what has been accomplished. Some years ago this subject awakened but little interest among the general public in the Argentine Republic, whilst all this is changed now. The examinations were held in the presence of large and select audiences, and the press gave full accounts, a thing which would almost have been unheard of some years ago. A large part of this number is taken up by extracts from the reports of various journals. The new interest awakened in the education of the deaf in one of the most progressive states of South America, augurs well for the future, and we may soon learn that the Argentine Republic, whose educational system, fashioned to a large extent on that of the United States, is of unusual excellence, will have supplemented it by a systematic effort to give to the deaf the same education which the hearing enjoy.

EDITORIAL.

The School in China

From Cheefoo, China, comes the pleasant news that the school for the deaf which Mrs. Annetta T. Mills is building up, has reduced its debt by the sum of \$1500. \$5375 remains to be paid, but it should not take long to raise this amount among the friends of education in America. The school is doing a work not to be measured by the number of its pupils, for it is the sole institution of the kind in a country containing fully 100,000 deaf mutes and it should be liberally supported as an object lesson of what can be done with such children and as a training school for Chinese teachers who will in time carry the light of knowledge to the remotest parts of the empire. Almost all the encouragement and financial support that it has received has come from this country and to us will be awarded the credit for its success and for the larger results dependent thereon. Surely, there is no more worthy foreign mission to which Americans could give their money. Members of the American Association and others of our readers who may wish to assist in its work should remit to Mr. Z. F. Westervelt, Principal of the Rochester, N. Y., School for the Deaf.

S. G. D.

To Study American Schools

The letter from the Superintendent of the Volta Bureau, relating to the visit of Miss Serenius of Finland, to America, contains the very interesting information that the Government of Finland annually makes an appropriation to aid teachers of the deaf to visit schools in other countries during term time. Hitherto, the visits of Finnish teachers seem to have been limited to European countries. This year, for the first time, a teacher has been sent to America.

Why should not America follow the lead of Finland in this respect? It would certainly be very greatly to the advantage of our best teachers to have the opportunity of visiting other schools in this country and abroad during school term. American teachers can better afford to visit Europe, than European teachers can to visit America, because of the great difference in the cost of living.

We are glad to welcome Miss Serenius to America and trust she may be able to carry back with her much information of value to the deaf of Finland.

**The London
Conference**

Teachers of the deaf in America who are going abroad during the summer should make it a point to attend the Biennial Conference of the National Association of Teachers of the Deaf of Great Britain, to be held in London, July 7th to 10th. An interesting programme of work for the sessions will be provided, among the subjects to be discussed being such as "Compulsion," "Attendance," "Manual Instruction," "Registration," "The Professional Outlook," etc. The Braidwood Medal for the best paper on "The Ideal Teacher of the Deaf" will be awarded, and there will be demonstrations of practical teaching and visits to schools and institutions at work. The officers of the conference desire us to extend for them a cordial invitation to all American teachers to be present. For further information address Frank G. Barnes, Secretary, School for the Deaf, Homerton, London, N. E. S. G. D.

**An Acoustic
Problem**

Perhaps we have to do with a simple case of sensorial pathology, but so far as we know it has never yet been proposed as a subject for the teachers of the deaf, nor has it been placed in relation with the aural exercises, so that it seems opportune and interesting to call the attention of educators and otologists to a fact which we designate at present as "an acoustic problem."

All teachers of the deaf have certainly noticed the phenomenon to which we allude. It is today a noted fact that many of the deaf-mutes possess traces more or less appreciable of hearing, or rather their deafness, even though congenital, is not always total.

The question now is not to seek how or in what degree the traces of hearing may be utilized in teaching speech ; this question is as yet premature, at least for the otologists of Italy. We only wish to observe that some deaf-mutes with appreciable traces of hearing show irritation under acoustic sensations, not excepting that of the voice speaking close to their ear. We have noticed already this phenomenon in the adult deaf instructed by means of the mimic alone, and at first we believed it to be an exaggerated reaction on their part. Later when experimenting with acoustic exercises, not however in a systematic manner, with deaf youths in course of instruction, we observed the same phenomenon. The exercises which were undertaken with a childish curiosity by the pupils, soon came to an end with their rejection of every instrument. At first I attributed the aversion felt by the deaf to a prolonged use of the ear-trumpet, as also to the use of speech in teaching by hearing, to psychic fatigue alone. There are in fact the same reasons for explaining the phenomenon of fatigue in the field of the hearing as in that of sight.

Reflecting afterwards upon the different signs of reaction and upon the circumstance that the first to abandon the exercise were those pupils who possessed the most appreciable traces of hearing, it seems opportune to propose a solution of the problem, which we will formulate in the following terms : "On what depends the exaggerated sensibility in many deaf-mutes who have traces of hearing existing ?"

We believe that those best able to reply to this question are the otologists, who have made experimental researches based upon the continuous series of tones. (Bezold system). It may be that this question may seem too ingenuous to scientific men ; but for the educators of the deaf it constitutes however a real and true problem, and its solution might perhaps explain a circumstance of great practical value, that is of the imperfect corres-

pondence between the theory of systematic acoustic exercises and of the resulting effects of aural instruction.

We have tried for our part to seek a passable explanation of the circumstance noted, in the theory of Charcot about the plurality of sensorial types, and have concluded that the deaf can never be an acoustic type, on account of their poverty in images of this order. And this theory might be confirmed :

1. By the opposition of many of the deaf to the oral method, preferring to remain by themselves in the world of silence.

2. By the inefficacy of the aural system in cases where the evident traces of hearing had given rise to great hopes.

3. By the exaggerated idea of the acoustic effects of speech, song, laughter, and of other causes of sound or noise on the part of the totally deaf, or blind-deaf (Laura Bridgman and Helen Keller as typical examples).

However, these would be too hasty conclusions. Let us then await the response of science. With this however the contribution of the educators of the deaf is not excluded, who perhaps have gone further than I in practical experiments, and in the study of questions similar to the present one. G. FERRERI.

Training and Knowledge

The training of the mind prepares one to meet and overcome in the struggle for success in any calling, while knowledge is but an incidental acquisition to one trained to think. Let us be practical in our teaching in this direction. Let progress be by the slower path of sound reasoning and good judgment, rather than by the easier, but less efficient process of cramming.

When we do away with this "idolatry of knowledge," we are in a fair way to educate. How often, day after day, bright minds have no opportunity to show what possibilities are theirs because so much time is taken in conning long lessons in the text books, storing the mind with a vast amount of information which serves no practical use under the sun.

Pupils are often able to absorb large quantities of formal knowledge from the text book, but show no progress in origi-

nality of thought and expression. Is not our method of instruction wrong when this is the case? Is not our work in the school room still tinged by methods that have had their day and "ceased to be"?

It behooves us frequently to take account of stock and see how much real progress has been made. To begin with, we would note that about one half of the matter learned in history, geography, nature studies, etc., will be wholly forgotten a short time after leaving school. One fourth is probably of doubtful value. It serves rather to satisfy the minds of the outside world, who have preconceived ideas of what an education should be, and the rest of the child's education consists of a certain amount of mental training, which is by far the most valuable part. We must keep in mind that the ability to learn is of more value than the thing learned. We have a lifetime in which to acquire knowledge, but only a few years,—the time in school,—in which to train and develop the mind and, in our special work, to acquire a command of language.

The gymnasium gives opportunity for the most perfect physical development, and so likewise the school room should be the field for practice in mental gymnastics. If we are to fit the deaf to fill positions in life similar to those filled by the hearing, then there must be a large amount of training along those lines of thought and action which successful hearing persons are pursuing. It is by closely looking at the environment of the business man, the farmer, the mechanic, and the laborer, that we are able to see what is most necessary to be learned by one who may at some time occupy such a position. It is obvious that in the short time that pupils remain in school much must be left out and a careful selection made of what we will teach.

To me it seems absurd to teach, say, third year pupils, studies of nature and attempt to cram them with facts with which even the well informed are not conversant, when they are not yet able to carry on an intelligible conversation. The mysteries of coral formations and the production of caoutchouc are interesting bits of knowledge, but are out of place while the child is struggling to acquire the language for the expression of his simpler and more useful experiences. In selecting material for

the pupils to learn, we should always apply to it the test of its practical benefit.

The daily conversation of people is seldom upon topics found in nature study books, scientific works, etc. The life of most individuals is one of scheming, judging, and thinking. So with the pupils. Their work should be upon matters that give mental exercise. It should be constructive and original in its nature, and not a display merely of the accumulated knowledge of other and better thinkers.

E. G. HURD.

THE MEETING OF THE CONFERENCE OF SUPERINTENDENTS AND PRINCIPALS.

To the Members of the Conference:

The first Conference of Superintendents and Principals (sometimes erroneously referred to as the Sixth Convention) was held at Washington, D. C., May, 1868; the second at Flint, Michigan, August, 1872; the third at Philadelphia, July, 1876; the fourth at Northampton, Massachusetts, May, 1880; the fifth at Faribault, Minnesota, July, 1884; the sixth (Gallaudet Conference) at Jackson, Mississippi, April, 1888; the seventh at Colorado Springs, Colorado, August, 1892; and the eighth and last, after an interval of eight years, at Talladega, Alabama, June, 1900. At the meeting of the Convention of American Instructors of the Deaf held at Flint in 1895, a special session of the members of the Conference present was held for the purpose of taking over the control and supervision of the American Annals of the Deaf, which theretofore had been under the supervision of the Convention, and for other special business brought before it. A special session of the members of the Conference present was also held at the meeting of the Convention of Instructors at Columbus in 1898, to receive the report of the Executive Committee, and elect a new Executive Committee.

At the first meeting in Washington no provision was made as to how often the Conference should meet, but at the Convention meeting in Indianapolis two years later it was agreed by the be held alternating with the Convention which met quadren-

nially. This custom prevailed until 1892, after which there was no regular meeting of the Conference until the Talladega meeting in 1900. At this last meeting, which, while not large, was enthusiastic, the consensus of opinion was that the meetings of the Conference should be held regularly and triennially, the general idea being that the meetings of the Conference, the Convention, and the Association could be made to alternate and thus avoid making the Conference secondary or incidental to any other gathering. It was believed that the regular gathering of Superintendents and Principals could be made of unusual interest and value along practical lines relating to management, matters of legislation, salaries, and wages, courses of study literary and industrial, higher education in our State schools, our relation to the College, the advantages and disadvantages of day-schools and their supervision and relation to the State school, post-graduate courses, aid and supervision for the deaf subsequent to school life, and many other subjects constantly brought to a Superintendent's attention and not usually touched upon at our other meetings except in an incidental and most superficial manner. It was also the belief that State officers and trustees of schools should be urged to attend the Conference.

This, therefore, is the year for the regular meeting, but difficulties present themselves not thought of in 1900. The Association meeting, which it was thought would be held in 1902, will be held in Boston this year, and in 1904 the Convention meets in Morganton, North Carolina. Now, the Conference is to meet either this summer or next, there is no other way open except to meet at the same time and place with one of the other gatherings, for it is almost certain that Superintendents would not wish to attend two meetings at different times and places during the same summer. Meeting with one of the other gatherings, the sessions would naturally be only incidental to the larger gathering, and would be very brief and probably limited to one session of strictly business nature—thus making the Conference entirely foreign to what we would wish it.

Under existing conditions, therefore, the Executive Committee, after full thought and advice in the matter, considers it proper and wise to postpone the holding of the Ninth Conference

of Superintendents and Principals until the summer of 1905, the place and date to be hereafter selected. In the meantime, the Executive Committee will hold a meeting (due notice of which will be given) either at Boston or at Morganton for the purpose of auditing the accounts of the Annals and for the transaction of any other business that may be presented, including proposals for 1905, making proper report of its doings through the Annals. It is hoped this action of the Committee will be approved.

Respectfully submitted.

FRANCIS D. CLARKE,
JOSEPH H. JOHNSON,
WILLIAM K. ARGO,
A. L. E. CROUTER,
RICHARD O. JOHNSON,

APRIL 2, 1903.

Chairman.

DEPARTMENT OF SPECIAL EDUCATION, N. E. A.

The following is the program for the sessions of the Department of Special Education of the National Educational Association meeting in Boston, July 6-10, as given in the official program-bulletin of the Association:

WEDNESDAY MORNING, JULY 8.

1. President's Address—Edward E. Allen, principal of the Pennsylvania Institution for the Instruction of the Blind, Philadelphia, Pa.
2. The Influence of the Study of the Unusual Child upon the Teaching of the Usual—Frank H. Hall, ex-superintendent of the Institution for the Blind, Jacksonville, Ill.; George E. Johnson, Dean of the lower school, University School, Cleveland, Ohio.

Discussion—Francis Burke Brandt, professor of pedagogy, Central High School, Philadelphia, Pa.

3. Should the Scope of the Public School System be Broadened to Take in All Children Capable of Education, and if so, How Should This be Done?—Alexander Graham Bell, Washington, D. C.; Miss Mary C. Green, ex-superintendent of special classes for the blind in the Board Schools, London, England.

Discussion—Thomas D. Woods, M. D., professor of Physical Training, Teachers' College, Columbia University, New York City; Miss Ellen Le Garde, director of Physical Training, including that of backward children, Public Schools, Providence, R. I.; G. Ferreri, ex-vice-principal of the School for the Deaf, Siena, Italy.

4. Report of the Commission on Statistics Relative to Children in the Public Schools of the United States Who Need Special Methods of Instruction—F. W. Booth, editor THE ASSOCIATION REVIEW, Philadelphia, Pa.

FRIDAY MORNING, JULY 10.

1. How Can the Term Charitable be Justly Applied to the Education of Any Children?—Charles W. Birtwell, general secretary, Children's Aid Society, Boston, Mass.; Edward A. Fay, vice president of Gallaudet College, Washington, D. C., editor of American Annals of the Deaf.

Discussion.

2. What Teachers Need to Know About Sense Defects and Impediments: Messages chiefly from Specialists in Medicine—Clarence J. Blake, M. D., professor of Otology, Harvard Medical School, Boston, Mass.; Myles Standish, M. D.; instructor in Ophthalmology, Harvard Medical School, Boston, Mass.; Allen Greenwood, M. D., Ophthalmologist, Boston, Mass.; Eugene Crockett, M. D., specialist on diseases of the nose and naso-pharynx, Boston, Mass.; Mrs. E. J. Ellery Thorpe, specialist on speech defects, Newton Center, Mass.

Discussion.

THE SCHOOL EXHIBITS AT ST. LOUIS.

The Department of Education of the St. Louis Exposition has issued a revised edition of the circular concerning the Exhibits of Schools for the Deaf and the Blind in connection with the St. Louis Universal Exposition of 1904 which contains the following additional information :

These schools are provided for in the official classification of the Exposition under Group 7, Department of Education, Classes 19 and 20, respectively.

It is the policy of the Committees that all methods of instruction shall be fairly represented.

The Exposition Company assumes no risk or responsibility for the health or safety of the pupils, and no expense except to furnish a building to be used as a dormitory.

Visitors will be convinced of the intellectual capacity of the deaf and the blind, and their ability of self-support by this open demonstration, and it is to be hoped the operation of these schools will permanently impress upon the public mind the idea that the training of the deaf and the blind is purely educational and in no sense a matter of charity on the part of the State.

Any school or institution not desiring to enter into this collective exhibit, and to share the benefits of this plan, is at liberty to make an independent application for space to the Chief of the Department of Education.

MARGARET GARDNER.

The death of Miss Margaret Gardner, a teacher in the Milwaukee Day School for the Deaf, occurred on the 14th of April, after an illness lasting but a few weeks.

This sad and unexpected event following so closely the date which marked the dedication of our new school building, serves to remind us that in the midst of joy is the ever present sorrow; that when the future seems most bright and promising, often comes the severest blow.

Words are but feeble carriers for the expression of our feelings, as we realize the sense of personal loss which has come to each one of us and to our school.

The life of Miss Gardner was an example of unselfish devotion and usefulness to all who were associated with her in her home, church, school and social life, and all bear witness to her many excellent traits of character.

As a teacher, she was efficient, faithful, kind, patient and sympathetic to a marked degree.

As a friend we ever found her ready and more than willing to do a kindness or favor, which was only one proof of her noble, generous nature.

While our hearts still yearn for the companionship which we miss so sadly, for our consolation we reflect upon the simple courage, founded on the Christian's hope, with which she laid down her life here to enter the paradise of the blessed.

With the blessed assurance that "all is well," we bow in humble submission to the Divine Will. To the bereaved family

we extend our sympathy and bid them take comfort and rejoice in their heritage of the example of a noble life spent in well-doing.

THE TEACHERS.

THE CALIFORNIA DAY SCHOOL LAW.

In the April number of the *REVIEW* we gave extracts from the laws relating to the establishment of day schools in the state of California passed by the legislature at its recent session. According to the copies of the bills from which we quoted, the provision of such schools was made obligatory. We have since learned that, as finally passed, by the substitution of the words "may at their discretion" for the word "must," in the principal act, the law leaves the matter to the judgment of the school officers. Following is the act as signed by the Governor, March 9, 1903.

Section 1. A new section is hereby added to the Political Code, is to be known as sixteen hundred and eighteen, to read as follows:

1618: The board of education of every city or city and county, or board of trustees of every school district in this State, containing five or more deaf children, or children who from deafness are unable to hear common conversation, between the ages of three and twenty-one years, may in their discretion establish and maintain separate classes in the primary and grammar grades of the public schools, wherein such pupils shall be taught by the pure oral system for teaching the deaf.

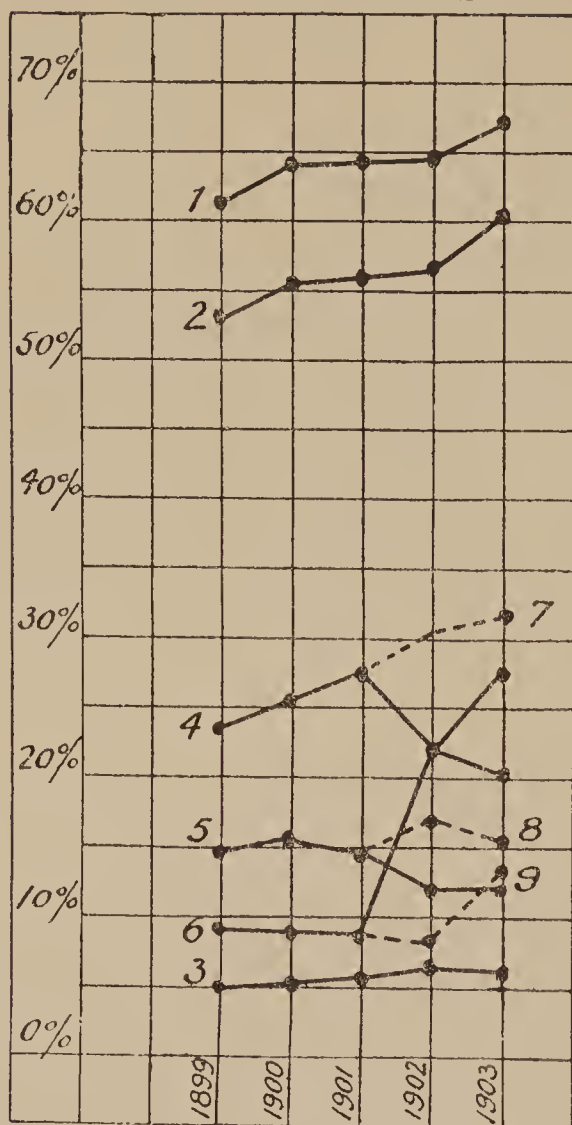
Section 2. This act shall take effect and be in force from and after its passage.

During the month of April, Dr. A. Graham Bell, President of the Association, visited Milwaukee, Wis., where he was the guest of honor on the occasion of the dedication of the new building of the Milwaukee Day School for the Deaf. Later he went to Indianapolis to confer with Mr. Johnson regarding the Annual Meeting of the Association, and to Chicago, where a dinner was given in his honor by the teachers of the Chicago day schools. We learn from the daily press that Dr. Bell has lately resigned the presidency of the National Geographic Society to devote his time to the study of aerial navigation and to other objects in which he is deeply interested.

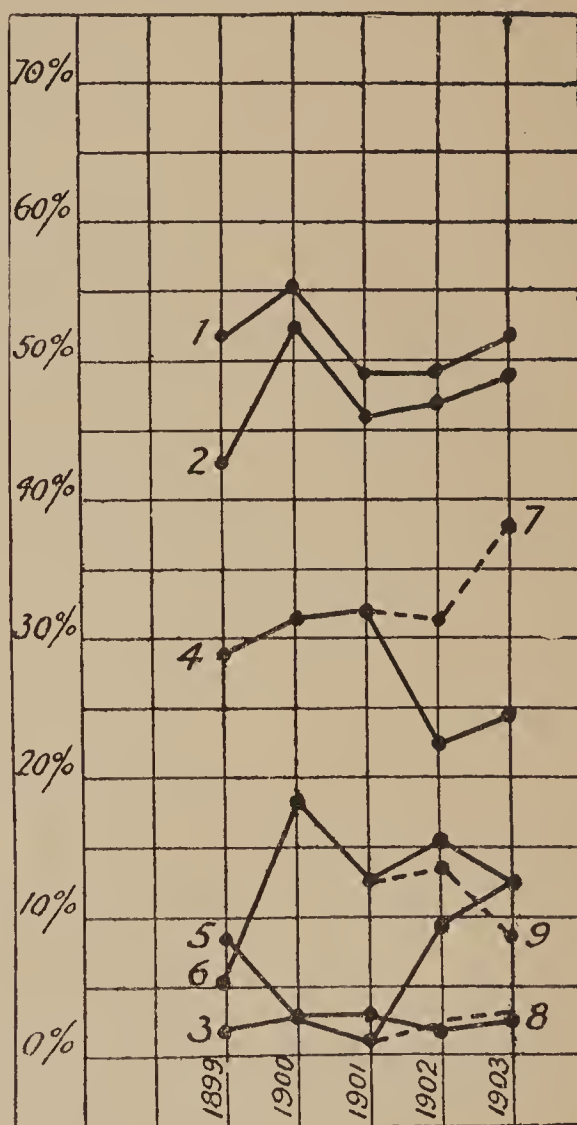
REPORT ON THE PROGRESS OF SPEECH-TEACHING
IN AMERICA.

Speech-teaching in American Schools for the Deaf 1899—1903.

UNITED STATES.



CANADA.



KEY TO SPEECH DIAGRAMS.

The diagrams represent graphically the percentage of pupils taught speech in schools for the deaf in the United States and Canada, according to the statistics which have been gathered annually by the REVIEW since 1899. The speech-statistics collected by the Annals are now given separately in the February number of the REVIEW. (See this volume pp. 94—96).

The figures on which the above diagrams are based are given on the opposite page, and the columns are numbered to correspond to the curves upon the diagrams.

1. Total taught Speech. (*Summation of all Cases*).
2. Speech *used* as a means of instruction (*with or without spelling or sign-language*).

3. Taught Speech, but Speech *not used* as means of instruction.

MEANS OF INSTRUCTION IN SCHOOL AND OUTSIDE.

4. Taught by Speech (*no spelling, no sign-language*).
5. Taught by Speech and Spelling (*no sign-language*).
6. Taught by Speech, Spelling, and Sign-Language.

SCHOOL ROOM USAGE.

(Without reference to outside instruction).

7. Taught by Speech (*no spelling, no sign-language*).
8. Taught by Speech and Spelling (*no sign-language*).
9. Taught by Speech, Spelling, and Sign-Language.

SPEECH-TEACHING IN THE UNITED STATES—1899 to 1903.

NUMBER OF PUPILS.

Year.	Taught Speech	Speech Used	Not Used	Taught by Speech			School-room Usage		
				S	SS	SSS	S	SS†	SSS‡
	1	2	3	4	5	6	7	8	9
1899....	6460	5584	535	2496	1549	972			
1900*....	6884	5969	582	2757	1643	995			
1901....	7131	6167	621	3020	1611	1009			
1902....	7164	6276	712	2506	1323	2412	3400	1903	938
1903....	7561	6793	645	2331	1364	3098	3552	1754	1487

PERCENTAGE OF PUPILS.

1899....	61.4%	53.1%	5.1%	23.7%	14.7%	9.2%			
1900*....	64.0%	55.5%	5.4%	25.7%	15.3%	9.2%			
1901....	64.7%	56.0%	5.6%	27.4%	14.6%	9.2%			
1902....	64.7%	56.7%	6.4%	22.6%	12.0%	21.8%	30.6%	17.2%	8.5%
1903....	67.2%	60.3%	5.8%	20.7%	12.1%	27.5%	31.5%	15.6%	13.2%

SPEECH-TEACHING IN CANADA—1899 to 1903.

Year.	Taught Speech	Speech Used	Not Used	Taught by Speech			School-room Usage		
				S	SS	SSS	S	SS†	SSS‡
	1	2	3	4	5	6	7	8	9
1899....	404	330	14	225	64	41			
1900....	434	411	23	247	20	144			
1901....	384	361	23	251	8	102			
1902....	393	377	16	180	75	122	250	20	107
1903....	387	367	20	183	93	91	283	21	63

PERCENTAGE OF PUPILS.

1899..	52.1%	42.6%	1.8%	29.0%	8.3%	5.3%			
1900....	55.4%	52.5%	2.9%	31.5%	2.6%	18.4%			
1901....	48.8%	45.9%	2.9%	31.9%	1.0%	13.0%			
1902....	49.2%	47.2%	2.0%	22.6%	9.4%	15.3%	31.4%	2.6%	13.4%
1903....	51.8%	49.1%	2.7%	24.5%	12.4%	12.2%	37.8%	2.8%	8.4%

Symbols employed in above Table:

S SPEECH without spelling or sign-language.

SS SPEECH & SPELLING with sign-language.

SSS SPEECH, SPELLING and SIGN-LANGUAGE.

* See corrected Table Vol. II p. 449.

† Including unclassified cases taught by SS.

‡ Including unclassified cases taught by SSS.

Year.	United States.		Canada.	
	Number of Schools.	Number of Pupils.	Number of Schools.	Number of Pupils.
1899.....	101	10,515	7	775
1900.....	115	10,750	7	784
1901.....	116	11,022	7	787
1902.....	124	11,069	7	798
1903.....	129	11,265	6	748

TABLE I.—SCHOOLS FOR THE DEAF IN THE UNITED STATES.
(Arranged alphabetically according to location.)

State or Territory.	Town.	Street or District.	Official Name of School.	Chief Executive Officer.
Alabama.....	Talladega.....	.....	Alabama Institute for the Deaf.....	Joseph H. Johnson, M.A.
Arkansas.....	Little Rock....	.....	Arkansas Deaf-Mute Institute.....	Frank B. Yates.
California.....	Berkeley.....	.....	California Institution for the Deaf and the Blind	W. Wilkinson, M.A., L.H.D.
do.....	Los Angeles....	.....	Los Angeles Oral School for the Deaf.....	Mary E. Bennett.
do.....	Oakland.....	.....	Oakland Oral Day School for the Deaf.....	Charlotte Louise Morgan.
do.....	do.....	Eleventh and Jefferson Sts.,	St. Joseph's School and Home for Deaf-Mutes..	Sister M. Valeria.
do.....	San Francisco..	Telegraph Ave., No. 4002.,...	San Francisco Day School for the Deaf.....	Mrs. Jennie B. Holden.
Colorado.....	Col. Springs....	Grove St., near Larkin.....	Colorado School for the Deaf and the Blind....	W. K. Argo, M.A.
Connecticut...	Hartford.....	.....	American School for the Deaf.....	Job Williams, M.A., L.H.D.
do.....	Mystic.....	.....	Mystic Oral School for the Deaf.....	Alice H. Damon, B.A.
Dist. Columbia	Washington...	Kendall Green	Columbia Institution for the Deaf and Dumb....	E. M. Gallaudet, Ph.D., LL.D.
			Comprising } The Kendall School for the Deaf	James Denison, M.A.
Florida.....	St. Augustine..	.....	Florida Institute for the Deaf.....	E. M. Gallaudet, Ph.D., LL.D.
Georgia.....	Cave Spring..	.....	Georgia School for the Deaf.....	Wm. B. Hare.
Illinois.....	Chicago.....	.....	Burr Public Day-School for the Deaf.....	Wesley O. Connor.
do.....	do.....	Ashland and Wabansia St....	Clarke Public Day-School for the Deaf.....	
do.....	do.....	Ashland and West 13th St....	Prescott Public Day-School for the Deaf.....	
do.....	do.....	Ashland & Wrightwood Aves..	Darwin Public Day-School for the Deaf.....	
do.....	do.....	Edgewood Av. & Catalpa Ct.	Schley Public Day-School for the Deaf.....	
do.....	do.....	Evergreen Av. & Robey St..	Seward Public Day-School for the Deaf.....	
do.....	do.....	Gross Ave., No 4630.....	Dore Public Day-School for the Deaf.....	
do.....	do.....	Harrison, near Halstead St...	Koziminski Public Day-School for the Deaf....	
do.....	do.....	Ingleside Ave. and 54th St...	P. D. Armour Public Day-School for the Deaf...	
do.....	do.....	Morgan St. and 33d Place....	Lyman Trumbull Pub. Day-School for the Deaf	
do.....	do.....	Sedgewick and Division Sts.	Yale Public Day-School for the Deaf.....	
do.....	do.....	Seventieth St. and Yale Ave..	Hammond Public Day-School for the Deaf.....	
do.....	do.....	Twenty-first Pl. n'r Cal. Av. .	Froebel Public Day-School for the Deaf.....	
do.....	do.....	Twenty-first St. and Robie...	13 Public Day-Schools.....	Mary T. McCowen.
do.....	do.....	The above.....	Ephpheta School for the Deaf.....	Margaret Cosgrove.
do.....	do.....	South May Street, No. 409...		

Illinois.....	.....do.....	Yale Avenue, No. 6550.....	McCowen Oral School for Young Deaf Children	Cornelia D. Bingham.
do... ..	Jacksonville...	.....	Illinois Inst. for Education of Deaf and Dumb...	Joseph C. Gordon, M.A, Ph.D.
do.....	Rockford.....	.....	Rockford Day-School for the Deaf.....	Sarah M. Kinnaird.
do.....	Rock Island...	Fifth Ave., No. 1122.....	Rock Island Day-School for the Deaf.....	Meta C. Wittig.
do.....	Streator.....	.....	Streator Day-School for the Deaf.....	Edith E. Brown.
Indiana.....	Evansville.....	Seventh and Vine Streets...	Evansville Day-School for the Deaf.....	James E. Gallagher.
do.....	Indianapolis...	.....	Indiana Inst. for Education of Deaf and Dumb...	Richard Otto Johnson.
Iowa.....	Council Bluffs.	.....	Iowa School for the Deaf.....	Henry W. Rothert.
Kansas.....	Olathe.....	.....	Kansas School for the Deaf.....	H. C. Hammond.
Kentucky.....	Danville.....	.....	Kentucky Inst. for Education of Deaf-Mutes...	Augustus Rogers, M.A.
Louisiana.....	Baton Rouge...	.....	Louisiana Inst. for Ed. of Deaf and Dumb.....	John Jastremski, M.D.
do.....	Chinchuba.....	.....	Charitable Deaf-Mute Inst. of the Holy Rosary	Fr. Gabriel.
Maine.....	Portland.....	Spring Street, Nos. 79 to 85.	Maine School for the Deaf.....	Elizabeth R. Taylor.
Maryland.....	Baltimore.....	Hollins St., Nos. 851 to 853.	F. Knapp's Institute.....	Win. A. Knapp.
do.....	do.....	McCulloh St., No. 903.....	St. Francis Xavier's School for the Deaf.....	Mother M. Joseph Hartwell.
do.....	do.....	West Saratoga Street, No. 649	Maryland School for the Colored Blind and Deaf	Frederick D. Morrison, M.A.
do.....	Frederick City.	.....	Maryland School for the Deaf and Dumb.....	Charles W. Ely, M.A.
Massachusetts.	Beverly.....	113 Elliott Street.....	New England Industrial School for Deaf-mutes	Nellie H. Swett.
do.....	Boston.....	Jamaica Plain.....	Boston School for the Deaf.....	Rev. Thomas Magennis.
do.....	do.....	Newbury Street, No. 178.....	Horace Mann School for the Deaf.....	Sarah Fuller.
do.....	Northampton..	.....	Clarke School for the Deaf.....	Caroline A. Yale, LL.D.
do.....	West Medford	Woburn Street, No. 93.....	Sarah Fuller Home for Little Children Who	
			Cannot Hear.....	Eliza L. Clark.
Michigan.....	Bay City.....	.....	Bay City Day-School for the Deaf.....	Martha Hill.
do.....	Calumet.....	.....	Calumet Day-School for the Deaf.....	Gertrude Van Adestine.
do.....	Detroit.....	Porter St. and Michigan Ave.	Detroit Day-School for the Deaf.....	Elizabeth Van Adestine.
do.....	Flint.....	.....	Michigan School for the Deaf.....	Francis D. Clarke, M.A., C.E.
do.....	Grand Rapids.	.....	Grand Rapids Day-School for the Deaf.....	Margaret M. Sullivan.
do.....	Menominee.....	.....	Menominee Day-School for the Deaf.....	Olive Newlin.
do.....	Muskegon.....	.....	Muskegon Day-School for the Deaf.....	Jessie Branford
do.....	North Detroit.	.....	Evangelical Lutheran Institution for the Deaf...	Rev. W. Gillard.
do.....	Saginaw.....	.....	Saginaw Day-School for the Deaf.....	Clara E. Kranzusch.
Minnesota.....	Faribault.....	.....	Minnesota School for the Deaf.....	James N. Tate, M.A.
Mississippi....	Jackson.....	.....	Mississippi Inst. for Ed. of Deaf and Dumb.....	J. R. Dobyns, M.A.
Missouri.....	Fulton.....	.....	Missouri School for the Deaf and Dumb.....	Noble B. McKee, M.A.
do.....	St. Louis.....	Cass Avenue, No. 1840.....	Mariae Consilia School for the Deaf.....	Sister M. Adele.
do.....	do.....	Henrietta St., No. 3435.....	Gallaudet School for the Deaf.....	James H Cloud. M.A.
do.....	S. St. Louis...	Longwood Place	St. Joseph's Deaf-Mute Institute for Boys.....	Rev. Mother Agatha.

TABLE I—CONTINUED.—SCHOOLS FOR THE DEAF IN THE UNITED STATES.

State or Territory.	Town.	Street or District.	Official Name of School.	Chief Executive Officer.
Montana.....	Boulder.....	.....	Montana School for Deaf and Blind.....	Thos. S. McAloney.
Nebraska.....	Omaha.....	.....	Nebraska Institute for the Deaf and Dumb.....	R. E. Stewart.
New Jersey.....	Trenton.....	.....	New Jersey School for Deaf-Mutes.....	J. P. Walker, M.A.
New Mexico...	Santa Fe.....	.....	New Mexico School for the Deaf and the Blind	Lars M. Larson, B.A.
New York.....	Albany.....	Pine Hills	Albany Home Sch. for Oral Instr. of the Deaf..	Mary McGuire.
do.....	Brooklyn.....	113 Buffalo Ave.....	Branch of St. Joseph's Inst. for the Improved	Mary C. Hendrick.
do.....	Buffalo.....	Edward Street, No. 125.....	Instruction of Deaf-Mutes.....	Sister Mary Anne Burke.
do.....	Fordham.....	East 188th Street, No. 772...	Le Couteulx St. Mary's Inst. for the Improved	N. Francis O'Connor.
do.....	Malone.....	.....	Instruction of Deaf-Mutes.....	Edward C. Rider.
do.....	New York.....	904 Lexington Avenue.....	Branch of St. Joseph's Inst. for the Improved	E. A. Gruver, B.A.
do.....	do.....	Washington Heights	Instruction of Deaf-Mutes.....	Enoch Henry Currier, M.A.
do.....	do.....	Washington Heights.....	Northern New York Institution for Deaf-Mutes	{ Mrs. A. Reno Margulies.
do.....	do.....	West 76th Street, No. 42.....	New York Inst. for Imp'd Inst'n of Deaf-Mutes	} Mrs. J. Scott Anderson.
do.....	Rochester.....	North St. Paul St., No. 945...	New York Inst. for Instr. of Deaf and Dumb...	J. D. Wright, M.A.
do.....	Rome.....	.....	Washington Heights School for Children with	Z. F. Westervelt, LL.D.
do.....	Westchester...	.....	Defective Hearing.	Edward Beverly Nelson, M.A.
North Carolina	Morganton...	.....	Wright Oral School.....	Ellen E. Cloak.
do.....	Raleigh.....	.....	Western New York Inst. for Deaf-Mutes.....	E. McKay Goodwin, M.A.
North Dakota.	Devils Lake...	.....	Central New York Inst. for Deaf-Mutes.....	John E. Ray, M.A.
Ohio.....	Canton.....	.....	Branch of St. Joseph's Inst. for the Improved	Dwight F. Bangs.
do.....	do.....	.....	Instruction of Deaf-Mutes.....	Katharine Mae Binkley.
do.....	do.....	719 W. Sixth Street.....	North Carolina School for the Deaf and Dumb..	Virginia A. Osborn.
do.....	do.....	719 W. Sixth Street.....	N. C. Inst. for the Deaf and Dumb and the Blind	Caroline Fesenbeck.
do.....	do.....	East Sixth Street	Deaf and Dumb Asylum (of North Dakota)....	Sister Mary of the Sacred Heart.
do.....	Cleveland.....	Rockwell and Bond Streets.	The Canton Oral Day-School for the Deaf and	Katharine E. Barry.
do.....	Columbus.....	.....	Defective in Hearing.....	J. W. Jones, M.A.
do.....	do.....	46 Frankfort Street.....	Cincinnati Oral School for the Deaf.....	F. L. Willhoyte.
do.....	do.....	.....	Cincinnati Public School for the Deaf.....	
do.....	do.....	.....	Notre Dame School for the Deaf.....	
do.....	do.....	.....	Cleveland Day-School for the Deaf.....	
do.....	do.....	.....	Ohio Inst. for the Education of Deaf and Dumb	
do.....	do.....	.....	Private Day-School for Training in Speech of	
do.....	do.....	.....	Deaf Children before they are of School Age	

Ohio.....	Dayton.....	Corner Brown and Hess Sts.	Dayton School for the Deaf.....	Nannie C. Kennedy.
do.....	Elyria.....	.....	Elyria School for the Deaf.....	Harrietta A. Maxted.
Oklahoma.....	Guthrie.....	.....	Oklahoma Institute for the Deaf and Dumb.....	Pearl H. Dunham.
Oregon.....	Salem.....	.....	Oregon School for Deaf-Mutes.....	Thomas P. Clarke.
Pennsylvania..	Edgewood P'k .....	.....	West. Penna. Inst. for the Instruction of the Deaf and Dumb.....	William N. Burt, M.A.
do.....	Philadelphia...	Belmont and Monument Aves	Home for the Training in Speech of Deaf Chil- dren before they are of School Age.....	Mary S. Garrett.
do.....	do.....	Mount Airy	Pennsylvania Institution for the Deaf and Dumb	A. L. E. Crouter, M.A., LL.D.
do.....	Scranton.....	.....	Pennsylvania Oral School for the Deaf.....	Mary B. C. Brown.
Rhode Island..	Providence....	520 Hope St.....	Rhode Island Institute for the Deaf.....	Laura De L. Richards.
South Carolina	Cedar Spring... .....	.....	S. Carolina Inst. for the Education of the Deaf and the Blind.....	Newton F. Walker.
South Dakota.	Sioux Falls... .....	.....	South Dakota School for Deaf-Mutes.....	James Simpson.
Tennessee....	Knoxville.... .....	.....	Tennessee Deaf and Dumb School.....	Thomas L. Moses.
Texas.....	Austin.....	.....	Deaf, Dumb, and Blind Inst. for Colored Youth	S. J. Jenkins.
do.....	do.....	.....	Texas Deaf and Dumb Asylum.....	B. F. McNulty.
Utah.....	Ogden.....	.....	Utah State School for the Deaf and Dumb.....	Frank M. Driggs.
Virginia.....	Staunton.....	.....	Virginia School for the Deaf and the Blind.....	William A. Bowles.
Washington...	Vancouver....	.....	Washington School for Defective Youth.....	James Watson.
West Virginia.	Romney.....	.....	West Virginia Schools for Deaf and Blind.....	James T. Rucker.
Wisconsin.....	Appleton.....	.....	Appleton School for the Deaf.....	Hannah J. Gardner.
do.....	Ashland.....	.....	Ashland Day-School for the Deaf.....	Alice V. Robie.
do.....	Black R's Falls	.....	Black River Falls School for the Deaf.....	Blanche E. Argyle.
do.....	Delavan.....	.....	Wisconsin School for the Deaf.....	E. W. Walker.
do.....	Eau Claire....	.....	Eau Claire Day-School for the Deaf.....	Jennie C. Smith.
do.....	Fond du Lac..	.....	Fond du Lac Day-School for the Deaf.....	Anna Sullivan.
do.....	Green Bay....	.....	Green Bay Day-School for the Deaf.....	M. Stella Flatley.
do.....	La Crosse....	.....	La Crosse Day-School for the Deaf.....	Lida J. Kline.
do.....	Marinette....	Main Street, No. 1532.....	Marinette School for the Deaf.....	Jessie M. Daniels.
do.....	Milwaukee....	Seventh and Prairie Streets..	Milwaukee Public Day-School for the Deaf.....	Frances Wettstein.
do.....	Neillsville....	.....	Neillsville Day-School for the Deaf.....	Elizabeth H. Irish, B.A.
do.....	Oshkosh.....	.....	Oshkosh School for the Deaf.....	Carrie H. Archibald.
do.....	Racine.....	.....	Racine Day-School for the Deaf.....	Katharine Keating.
do.....	Rhineland....	.....	Rhineland Day-School for the Deaf.....	Gussie H. Greener.
do.....	St. Francis...	.....	St. John's Catholic Deaf-Mute Institute.....	Rev. M. M. Gerend.
do.....	Sheboygan....	.....	Sheboygan Day-School for the Deaf.....	H. Ray Kribs.

TABLE I.—CONTINUED.—SCHOOLS FOR THE DEAF IN THE UNITED STATES.

State or Province.	Town.	Street or District.	Official Name of School.	Chief Executive Officer.
Wisconsin.....	Sparta.....	.....	Sparta Day-School for the Deaf.....	Huldah Rudolph.
do.....	Stevens Point.....	.....	Stevens Point Day-School for the Deaf.....	Fannie F. Ferguson.
do.....	Wausau.....	.....	Wausau Day-School for the Deaf.....	Margaret Hurley.
do.....	West Superior.....	.....	Superior Day-School for the Deaf.....	Delia C. Page.
CANADIAN SCHOOLS.				
Manitoba.....	Winnipeg.....	.....	Manitoba Deaf and Dumb Institution.....	D. W. McDermid.
Nova Scotia...	Halifax.....	.....	Halifax Institution for the Deaf and Dumb.....	James Fearon.
Ontario.....	Belleville.....	.....	Ontario Institution for the Deaf and Dumb.....	Robert Mathison, M.A.
Quebec.....	Montreal.....	Berri Street, No. 546.....	Catholic Female Deaf and Dumb Institution....	Rev. Sister Philip of Jesus.
do.....	do.....	Mile End	Catholic Male Deaf-Mute Inst. for the Province of Quebec.....	Rev. M. Cadieux, C. S. V.
do.....	do.....	Notre Dame de Grace Street.	Mackay Inst. for Prot. Deaf-Mutes and Blind..	Mrs. H. E. Ashcroft

TABLE I.—CONTINUED.—SCHOOLS FOR THE DEAF IN THE UNITED STATES.

State or Province.	Town.	Street or District.	Official Name of School.	Chief Executive Officer.
Wisconsin.....	Sparta.....	.....	Sparta Day-School for the Deaf.....	Huldah Rudolph.
do.....	Stevens Point.....	.....	Stevens Point Day-School for the Deaf.....	Fannie F. Ferguson.
do.....	Wausau.....	.....	Wausau Day-School for the Deaf.....	Margaret Hurley.
do.....	West Superior.....	.....	Superior Day-School for the Deaf.....	Delia C. Page.
CANADIAN SCHOOLS.				
Manitoba.....	Winnipeg.....	.....	Manitoba Deaf and Dumb Institution.....	D. W. McDermid.
Nova Scotia...	Halifax.....	.....	Halifax Institution for the Deaf and Dumb.....	James Fearon.
Ontario.....	Belleville.....	.....	Ontario Institution for the Deaf and Dumb.....	Robert Mathison, M.A.
Quebec.....	Montreal.....	Berri Street, No. 546.....	Catholic Female Deaf and Dumb Institution....	Rev. Sister Philip of Jesus.
do.....	do.....	Mile End	Catholic Male Deaf-Mute Inst. for the Province of Quebec.....	Rev. M. Cadieux, C. S. V.
do.....	do.....	Notre Dame de Grace Street.	Mackay Inst. for Prot. Deaf-Mutes and Blind..	Mrs. H. E. Ashcroft

TABLE II.—SPEECH-TEACHING IN AMERICAN SCHOOLS FOR THE DEAF, APRIL 22, 1903.

Schools for the Deaf in THE UNITED STATES arranged alphabetically according to location		Number of Pupils.						SUPPLEMENTARY ENQUIRY									
		Total	Taught by SPEECH and SPEECH-READING		Taught Speech and Speech-Reading		Returns UNCLASSIFIED	Pupils taught by SPEECH and SPELLING without Sign-language			Pupils taught by SPEECH, SPELLING and SIGN-LANGUAGE						
			No Manual Spelling No Sign Language	Taught also by MANUAL SPELLING		Speech Not Used as a means of instruction		Query 3			Query 4						
				No Sign Language	Taught also by SIGN LANGUAGE			(a) S in Schoolr'm SS outside	(b) SS in Schoolr'm SS outside	Details not stated	(a) S in Schoolr'm SSS outside	(b) SS in Schoolr'm SSS outside	(c) SSS in Schoolr'm SSS outside	Details not stated			
Query 1	Query 2	Query 3	Query 4	Query 5													
Ala.	Talladega School (2).....	160	—	—	60	—	—	—	—	—	60	—	—	—	—		
Ark.	Little Rock School (3).....	243	—	—	51	22	—	—	—	—	29	22	—	—	105		
Cal.	Berkeley School.....	155	—	—	105	—	—	—	—	—	—	—	—	—	—		
"	Los Angeles School.....	13	13	—	—	—	—	—	—	—	—	—	—	—	—		
"	Oakland, 11th and Jefferson School.....	9	9	—	—	—	—	—	—	—	—	—	—	—	—		
"	Telegraph Ave. School.....	36	5	—	31	—	—	—	—	—	—	—	31	—	—		
"	San Francisco School.....	24	24	—	—	—	—	—	—	—	—	—	—	—	—		
Col.	Colorado Springs School.....	101	—	—	72	—	—	—	—	—	72	—	—	—	—		
Conn.	Hartford School (4).....	173	—	—	173	—	—	—	—	—	—	—	—	—	173		
"	Mystic School.....	31	31	—	—	—	—	—	—	—	—	—	—	—	—		
D. C.	Washington Kendall School (5).....	60	—	—	50	—	—	—	—	—	—	—	50	—	—		
"	Gallaudet College (6).....	97	—	—	—	—	—	—	—	—	—	—	—	—	—		
Fla.	St. Augustine School.....	58	—	—	11	29	—	—	—	—	11	—	—	—	—		
Ga.	Cave Spring School (7).....	140	—	—	70	—	—	—	—	—	—	—	—	—	70		
Ill.	Chicago, Ashland & Wabansia St.	8	8	—	—	—	—	—	—	—	—	—	—	—	—		
"	Ashland & W. 13th St.	7	7	—	—	—	—	—	—	—	—	—	—	—	—		
"	Ashland & Wrightwood.....	5	5	—	—	—	—	—	—	—	—	—	—	—	—		
"	Edgewood Ave. School.....	17	17	—	—	—	—	—	—	—	—	—	—	—	—		
"	Evergreen Ave. School.....	7	7	—	—	—	—	—	—	—	—	—	—	—	—		
"	Gross Ave. School.....	14	14	—	—	—	—	—	—	—	—	—	—	—	—		
"	Harrison St. School.....	6	—	5	—	—	—	—	—	5	—	—	—	—	—		
"	Ingleside Ave. School.....	10	10	—	—	—	—	—	—	—	—	—	—	—	—		
"	Morgan St. School (8).....	6	—	—	6	—	—	—	—	—	—	—	6	—	—		
"	Sedgewick St. School.....	16	16	—	—	—	—	—	—	—	—	—	—	—	—		
"	Seventieth St. School.....	36	36	—	—	—	—	—	—	—	—	—	—	—	—		
"	Twenty-first Pl. & Cal. Av.	7	7	—	—	—	—	—	—	—	—	—	—	—	—		
"	Twenty-first & Robey Sts.	7	7	—	—	—	—	—	—	—	—	—	—	—	—		
"	13 Public Day Schools (9).....	146	134	5	6	—	—	—	—	5	—	—	6	—	—		
"	South May St. School (10).....	46	—	46	—	—	—	—	—	46	—	—	—	—	—		
"	Yale Ave. School.....	37	37	—	—	—	—	—	—	—	—	—	—	—	—		
"	Jacksonville School.....	481	—	358	—	123	—	—	—	358	—	—	—	—	—		
"	Rockford School.....	6	6	—	—	—	—	—	—	—	—	—	—	—	—		
"	Rock Island School.....	7	7	—	—	—	—	—	—	—	—	—	—	—	—		
"	Streator School (11).....	7	7	—	—	—	—	—	—	—	—	—	—	—	—		
Ind.	Evansville School (12).....	16	—	—	—	—	—	—	—	—	—	—	—	—	—		
"	Indianapolis School (13).....	324	—	—	153	—	—	—	—	—	123	12	18	—	—		
Iowa.	Council Bluffs School.....	255	—	—	108	—	—	—	—	—	108	—	—	—	—		
Kan.	Olathe School (14).....	235	—	—	88	14	—	—	—	—	—	63	25	—	—		
Ky.	Danville School.....	325	—	—	118	—	—	—	—	—	91	—	27	—	—		
La.	Baton Rouge School (15).....	116	—	—	51	—	—	—	—	—	51	—	—	—	—		
"	Chinchuba School.....	37	1	—	—	19	—	—	—	—	—	—	—	—	—		
Me.	Portland School (16).....	92	—	—	86	—	—	—	—	—	—	—	—	—	86		
Md.	Baltimore, Hollins St. School.....	26	26	—	—	—	—	—	—	—	—	—	—	—	—		
"	McCulloh St. Sch. (17).....	29	—	20	9	—	—	—	—	20	—	—	—	—	9		
"	W. Saratoga St. School.....	46	—	15	—	—	—	—	—	15	—	—	—	—	—		
"	Frederick City School (18).....	102	—	—	63	—	—	—	—	—	52	10	6	—	—		
Mass.	Beverly School.....	26	—	—	—	22	—	—	—	—	—	—	—	—	—		
"	Boston, Jamaica Plain School.....	40	40	—	—	—	—	—	—	—	—	—	—	—	—		
"	Newbury Street School.....	130	130	—	—	—	—	—	—	—	—	—	—	—	—		
"	Northampton School.....	149	149	—	—	—	—	—	—	—	—	—	—	—	—		
"	W. Medford School.....	13	13	—	—	—	—	—	—	—	—	—	—	—	—		
Mich.	Bay City School.....	6	6	—	—	—	—	—	—	—	—	—	—	—	—		
"	Calumet School (19).....	8	7	—	1	—	—	—	—	—	1	—	—	—	—		
"	Detroit School.....	37	37	—	—	—	—	—	—	—	—	—	—	—	—		
"	Flint School (20).....	406	—	—	—	96	—	—	—	—	—	—	—	—	—		
"	Grand Rapids School.....	30	30	—	—	—	—	—	—	—	—	—	—	—	—		
"	Menominee School.....	5	5	—	—	—	—	—	—	—	—	—	—	—	—		
"	Muskegon School.....	5	8	—	—	—	—	—	—	—	—	—	—	—	—		
"	North Detroit School.....	35	—	—	32	1	—	—	—	—	—	—	32	—	—		
"	Saginaw School.....	6	6	—	—	—	—	—	—	—	—	—	—	—	—		
Minn.	Faribault School.....	261	—	—	69	—	—	—	—	—	—	—	69	—	—		
Miss.	Jackson School (21).....	156	—	—	156	—	—	—	—	—	—	—	—	—	156		
Mo.	Fulton School.....	338	—	—	77	—	—	—	—	—	77	—	—	—	—		
"	St. Louis, Cass Ave. School (22).....	35	—	—	35	—	—	—	—	—	35	—	—	—	—		
"	Henrietta St. School.....	37	—	—	37	—	—	—	—	—	—	—	37	—	—		
"	So. St. Louis Sch. (23).....	19	—	—	16	—	—	—	—	—	—	—	16	—	—		
Mont.	Boulder School.....	35	—	—	24	—	—	—	—	—	14	—	10	—	—		
Neb.	Omaha School.....	175	—	84	91	—	—	84	—	—	—	—	91	—	—		
N. J.	Trenton School (24).....	140	—	—	140	—	—	—	—	—	48	—	92	—	—		
N. M.	Santa Fe School (25).....	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
N. Y.	Albany School (26).....	34	34	—													



TABLE III.—SPEECH-TEACHING IN AMERICAN SCHOOLS FOR THE DEAF, April 22, 1903.

GENERAL SUMMARY	United States		Canada	
	Number of Pupils	Per cent. of Pupils	Number of Pupils	Per cent. of Pupils
TAUGHT WHOLLY BY THE ORAL METHOD.				
Pupils taught by speech and speech-reading without being taught at all by the sign language (Query 2).....	2,331	20.7%	183	24.5%
TAUGHT PARTLY BY ORAL METHODS.				
Pupils taught by speech and speech-reading together with a manual alphabet, without being taught at all by the sign language. (Query 3).....	1,364	12.1%	93	12.4%
Pupils taught by speech and speech reading, and also taught by the sign language and manual alphabet (Query 4)	3,098	27.5%	91	12.2%
Total taught partly by Oral Methods....	4,462	39.6%	184	24.6%
TAUGHT SPEECH.				
Pupils with whom speech is used as a means of instruction (including those taught wholly by the Oral Method, and those taught partly by Oral Methods).....	6,793	60.3%	367	49.1%
Pupils taught speech but with whom speech is not used as a means of instruction (Query 5).....	645	5.8%	20	2.7%
Pupils taught speech but returns unclassified	123	1.1%	—	—
Total taught speech.....	7,561	67.2%	387	51.8%
NOT TAUGHT SPEECH				
Pupils taught exclusively by silent Methods of instruction.....	3,704	32.8%	361	48.2%
Total pupils in 129 schools in the United States	11,265	100.0%	.....	.....
Total pupils in 6 schools in Canada.....	.....	.....	748	100. %

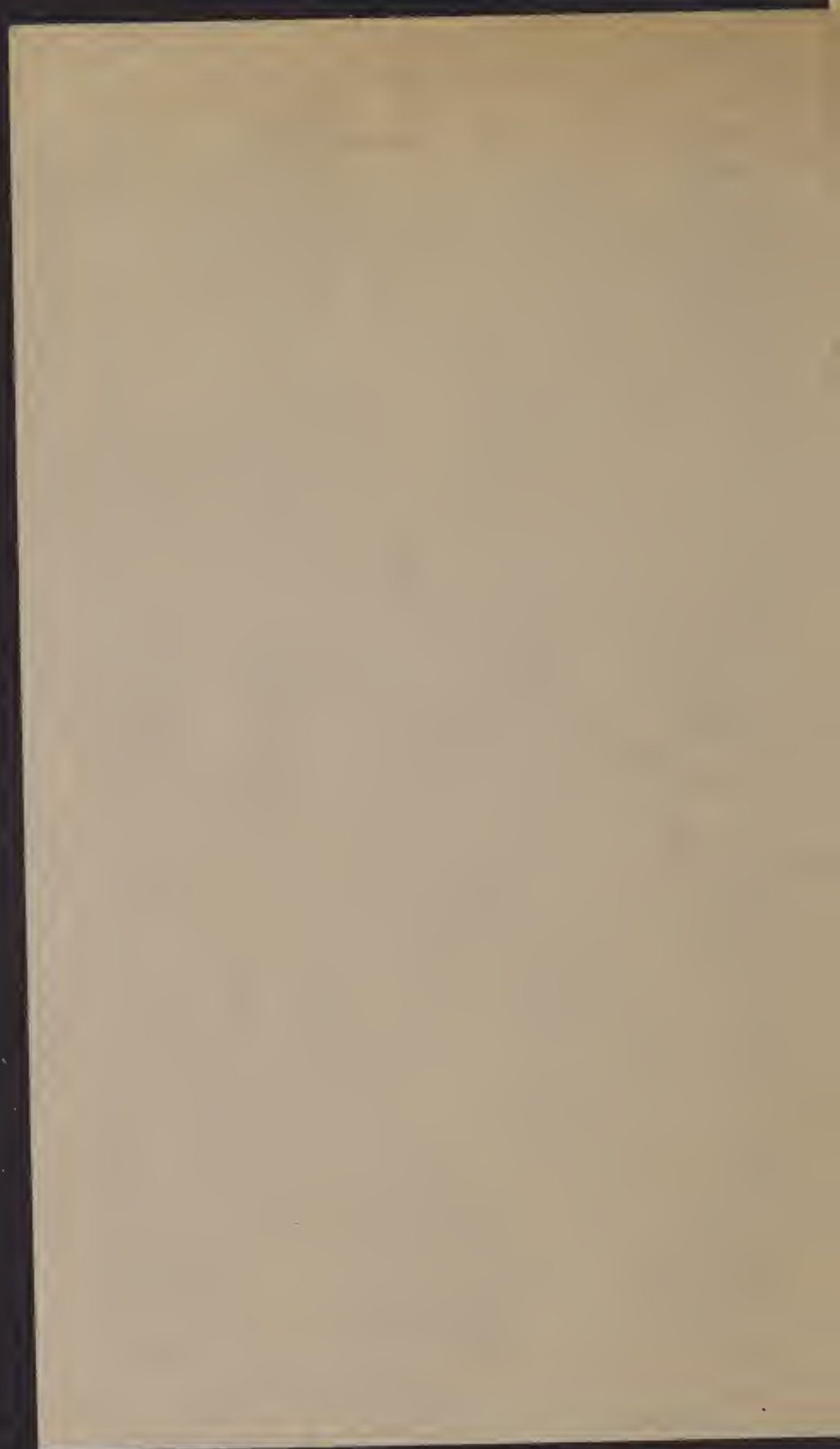
TABLE IV.—SPEECH-TEACHING IN AMERICAN SCHOOLS FOR THE DEAF.—APRIL 22, 1903.

SUPPLEMENTARY ENQUIRY Concerning pupils with whom speech is used as a means of instruction.	United States		Canada	
	Number of Pupils	Per cent. of Pupils	Number of Pupils	Per cent. of Pupils
QUERY 2				
SPEECH (without spelling or sign-language) used both in the school-room and outside :				
Total taught by Speech (without spelling or sign-language.)	2331	20.7%	183	24.5%
QUERY 3.				
(a) SPEECH (without spelling or sign-language) used in the school-room; but SPELLING (without sign-language) also used outside in chapel exercises, workshop instruction, etc	—	—	81	10.8%
(b) SPEECH and SPELLING (without sign-language) used both in the school-room and outside (including unclassified cases	1364	12.1%	12	1.6%
Total taught by SPEECH and SPELLING (without sign-language).....	1364	12.1%	93	12.4%
QUERY 4.				
(a) SPEECH (without spelling or sign-language) used in the school-room; but SPELLING and SIGN-LANGUAGE also used outside in chapel exercises, workshop instruction, etc	1221	10.8%	19	2.5%
(b) SPEECH and SPELLING (without sign-language) used in the school-room; but SIGN-LANGUAGE also used outside	390	3.5%	9	1.2%
(c) SPEECH, SPELLING and SIGN-LANGUAGE used both in the school-room and outside (including unclassified cases	1487	13.2%	63	8.4%
Total taught by SPEECH, SPELLING and SIGN-LANGUAGE	3098	27.5%	91	12.2%
Total with whom speech is used as a means of instruction.....	6793	60.3%	367	49.1%
SCHOOL-ROOM USAGE				
SPEECH (without spelling or sign-language) used in the school-room. Summation of all cases	3552	31.5%	283	37.8%
SPEECH and SPELLING (without sign-language) used in the school-room. Summation of all cases.....	1754	15.6%	21	2.8%
SPEECH, SPELLING and SIGN-LANGUAGE used in the school-room. Summation of all cases	1487	13.2%	63	8.4%

Read

Physical requisites
for a good speech
teacher !!

Can you qualify?!



NOTES.

(1) The above statistics have been received in reply to the following queries and supplementary questions:

Query 1. Total number of pupils in this school, April 22, 1903.

Query 2. Number taught by speech and speech-reading, (without being taught at all by the sign-language or manual alphabet) ?

Query 3. Number taught by speech and speech-reading, together with a manual alphabet, (without being taught at all by the sign-language) ?

Query 4. Number taught by speech and speech-reading, and also taught by the sign-language and manual alphabet.

Query 5. Number taught speech and speech-reading but speech not used as a means of instruction ?

SUPPLEMENTARY ENQUIRY AND REMARKS.

As stated in the REVIEW for June, 1902, Vol. IV, p, 304, we have in contemplation a change in the nature of the questions asked by the REVIEW, based upon the means of communication employed in the schoolroom and outside. In order to preserve the continuity of our statistics, it has been deemed advisable to make no change for the present in the main questions asked, but to vary the supplementary questions in a tentative manner so as to arrive at a more satisfactory form to be substituted for the old. In this connection we shall be very glad to have your views relating to the best form of questions to bring out the character and extent of speech-teaching in American schools for the deaf.

Query 2 is intended to elicit the number of pupils who are taught wholly by the oral method, without receiving instruction through the medium of the sign-language or manual alphabet, either in the schoolroom or outside, in chapel, work-shop, etc. It is understood that in the cases returned in answer to this query, speech (without spelling or sign-language) is used both in the schoolroom and outside.

Query 3 is intended to elicit the number of pupils who are taught in part by oral methods, and in part by means of a manual alphabet, but who receive no instruction whatever through the medium of the sign-language. In this connection we should like to know whether the manual alphabet is used in the schoolroom in conjunction with speech and speech-reading; or whether its use is limited to outside of the schoolroom. If you return pupils under the head of Query 3, please fill in the following supplementary details:

- (a) Speech (without spelling or sign-language) used in the schoolroom; but spelling (without sign-language) also used outside in chapel exercises, workshop instruction, etc., with.....pupils.
- (b) Speech and spelling (without sign-language) used both in the schoolroom and outside, with.....pupils.

Query 4 is intended to elicit the number who are taught in part by oral methods, and in part by sign-language methods. In these cases we should like to know whether the sign-language is used in the schoolroom in conjunction with speech and speech-reading; or whether its use

is limited to outside of the schoolroom. If you return pupils under the head of Query 4, please fill in the following supplemental details relating to them:

- (a) Speech (without spelling or sign language) used in the schoolroom, but spelling and sign-language also used outside in chapel exercises, work-shop instruction, etc., with.....pupils.
- (b) Speech and spelling (without sign-language) used in the schoolroom; but sign-language also used outside with.....pupils.
- (c) Speech, spelling and sign-language used both in the schoolroom and outside, with.....pupils.

Query 5 is intended to elicit the number of pupils who receive instruction in articulation without speech being used as a *means* of instruction—the number taught speech and speech-reading, but not taught *by* speech and speech-reading. The pupils we wish to record under this head are not taught by the oral method at all, but receive instruction in the use of their vocal organs for a limited period each day, or at least occasionally, their general education being carried on by silent methods of instruction.

(2) Talladega School (Ala.): Mr. Johnson says, "We have five classes, average number in each class 12, where speech and lip-reading is the vehicle of communication in the classroom, but all of these children attend the chapel where signs are used, and are in societies of various kinds where signs are used. Spelling, writing, signs and speech are used in the workshop."

(3) Little Rock School (Ark.): Queries 1, 243; 2, 29; 3, 22; 4, 0; 5, 22; Supplementary Queries 3a, 29; 3b, 22; these use signs out of school; 4a, 0; 4b, 22; 4c, 0; Miss Frances E. Gillespie, writing for Mr. Yates, says: "There are 51 pupils in our oral department. 29 of these are taught by speech, and 22 are taught by speech and speech-reading, together with the manual alphabet. In addition to these there are 22 who are taught in manual classes but receive instruction in speech and speech-reading for about 20 minutes a day. All of our pupils use signs when out of school. Most of the industrial teachers are deaf men, are unable to speak or read the lips, and are obliged to give instruction by spelling or signs."

(4) Hartford School (Conn.): Mr. G. O. Fay gives figures upon which we base our classification, but he says, "We have no classification that answers at all to your five queries."

(5) Kendall School (D. C.): Mr. James Denison, Principal, reported 50 pupils under Query 5, but cut this out, returning them instead under Query 4, with the note, "I consider that speech and speech-reading as taught here, *is* used as a means of instruction. It is made effective in teaching language in many ways."

(6) Gallaudet College (D. C.): Our figures are based upon the Annals statistics for January, 1903, which show total number of pupils, 97; taught speech, 49; taught wholly or chiefly by the oral method, 4.

(7) Cave Springs (Ga.): Mr. Connor writes: "I have heard of these"—pupils not taught at all by the sign-language or manual alphabet—"but have never seen a deaf person instructed without signs, and don't believe I ever will." In regard to the orally taught pupils, "We use speech with all as a means of instruction as far as possible, and then resort to anything that will help us along."

(8) Morgan St. School (Chicago, Ill.) Queries 1, 6; 2, 0; 3, 0; 4, 0; 5, 6; Supplementary Queries: 3a, 0; 3b, 0; 4a, 0; 4b, 0; 4c, 6. (As no pupils are returned under Query 4, we presume that 4c is in error, referring really to pupils returned under Query 5).

(9) Chicago Public Day-Schools (Ill.): Summary. Queries 1, 146; 2, 134; 3, 5; 4, 0; 5, 6. One pupil with paralyzed jaw is taught entirely by the manual alphabet. Supplementary Queries not summarized.

(10) South May St. School (Chicago, Ill.): Queries 1, 46; 2, 0; 3, 46; 4 signs are not taught; 5, 0; "We use the combined method—spoken and written language. Signs are allowed as a means of conversation."

(11) Streator School (Illinois): Statistics of June, 1902.

(12) Evansville School (Ind.) Total number of pupils from Annals of January, 1903. Mr. Gallagher writes: "For lack of funds, no speech teacher has been employed in this school since last January. From December 1901, to last January, my daughter, who had received special training in the McCowen Oral School, filled the position of teacher of speech, and all the pupils received instruction under her for part of the time each day."

(13) Indianapolis School (Ind.): Speech in schoolroom, speech, spelling, signs outside with 123 pupils includes 49 kindergarten pupils, with whom natural gestures incidental to kindergarten methods are used.

(14) Olathe School (Kan.): Mr. Hammond reports: 'Total number of pupils, 235; 2, all pupils use the sign-language and spelling outside of school, in the chapel and in the work-shops, etc.; 3, number of pupils taught orally in the school without the sign-language as a regular means of instruction, and with only an occasional use of spelling, 63. (The endeavor is made to make the instruction in these classes as purely oral as is possible. Now, of course, rather than fail to get an idea into the child's head, any means would be resorted to); 4, number of pupils taught in the schoolroom partly by the oral method and partly by the manual method, 25; 5, number of pupils taught articulation and lip-reading as an accomplishment, 14.' (In view of the above we have placed 63 pupils under 4b, and 25 pupils under 4c.)

(15) Baton Rouge School (La.): We have 51 pupils in the oral classes. While these pupils are taught speech in the class-rooms, they use signs and the manual alphabet on the outside, that is, in chapel, shops, etc.

JNO. JASTREMSKI.

(16) Portland School (Me.): There are 92 pupils, all but 6 of whom are taught through and by speech, writing, etc., and when it is necessary, an idea is spelled or signed. Few of the teachers understand or can use signs. "Some of the teachers may be learning signs from the pupils, but vice versa, No."

(17) Baltimore, McCulloh Street School (Md.): Statistics of June, 1902.

(18) Frederick School (Md.): Queries 1, 102; 2, 52; 3, 10; 4, 6; 5, 0. Supplementary Queries unanswered, but Mr. Ely notes that "All pupils attend chapel where signs and spelling are used." We have therefore placed his oral pupils as follows: 4a, 52; 4b, 10; 4c, 6.

(19) Calumet School (Mich.): Queries 1, 8; 2, 8; 3, 0; 4, 0; 5, 0; Supplementary Queries, 3a, 0; 3b, 0; 4a Speech (without spelling or

sign-language) used in the schoolroom; but spelling and sign-language also used *at home* with one pupil who previously attended a sign school: 4b, 0; 4c, 0.

(20) Flint School (Mich.): Total 403 pupils. Mr. Clarke says: "These questions in my opinion, being such as when unaccompanied by a long explanation, would put this school in a wrong light, I prefer not to answer them." Statistics of June, 1902.

(21) Jackson School (Miss.): Queries 1, 143; 2, 0; 3, 0; 4, 0; 5, 0. Mr. Dobyns says, "We *endeavor* to instruct everywhere without the use of signs, except in the chapel". Supplementary queries unanswered. Statistics of June, 1902.

(22) Cass Ave. School (St. Louis, Mo.): Queries 1, 35; 2, 15; 3, 20; 4, 0; 5, 0. Supplementary Queries 3a, 0; 3b, 0; 4a, 30; 4b, 0; 4c, 0; Sister M. Adele returned "all" pupils under 3a and then cut this out and put 30 pupils under 4a. We presume this means that "all" pupils should have been under 4a, and that 30 is an error for 35.

(23) South St. Louis School (St. Louis, Mo.): Queries 1, 19; 2, 0; 3, 0; 4, 16; 5, 0. Supplementary Queries 3a, 0; 3b, 0; 4a, 3; 4b, 3; 4c, 16.

(24) Trenton School (N. J.): Queries 1, 140; 2, 48; 3, 0; 4, 92; 5, 0. Supplementary queries, 3a, 0; 3b, 0; 4a, 48; 4b, 0; 4c, 92.

(25) Santa Fe School (N. M.): No session here this term because of no funds granted this year. LARS M. LARSON.

(26) Albany School (N. Y.): Statistics of June, 1902.

(27) Fordham School (N. Y.): "Our pupils are left free to converse together by whichever method they prefer."

(28) Malone School (N. Y.): Queries 1, 79; 2, 9; 3, 70; 4, 0; 5, 32. Supplementary queries, 3a, 9; 3b, 70; 4a, 0; 4b, 0; 4c, 0. As 32 pupils are taught speech but not taught by speech, we assume that the remainder, (47) are taught by speech and spelling, and so have placed them under 3.

(29) Washington Heights School (N. Y.): Supplementary Queries: I think 3b is the nearest to our practice. In some of our classes we use spelling but rarely in place of writing or to prevent loss of time when an obscure word is used and is not readily recognized upon the lips, but since it is used in emergencies, I place this school under 3b.

ENOCH HENRY CURRIER.

(30) Rochester School (N. Y.): "All receive special articulation and special speech reading exercises, but speech is used as a means of instruction with all classes or grades. All also have silent means of instruction the larger part of the time."

(31) Westchester School (N. Y.): Queries 1, 204; 2, 0; 3, 204; 4, 0; 5, 0. Supplementary Queries 3a, 0; 3b, 204 used in the schoolroom; 4a, 204 speech with spelling in the schoolroom. *Signs are not taught* but they are used outside of the schoolroom as a means of communication between the pupils themselves, interpreting religious instructions given in the chapel (on Sundays) and in the various workshops;" 4b, 0; 4c, 0. In view of the above we have placed the 204 pupils under the head of 4b.

(32) Devil's Lake School (N. D.): All pupils use signs outside of schools and in shops.

(33) Cincinnati Oral School (O.): Supplementary Queries: The 5 questions seem to me to completely cover the ground desired, and will if accurately answered, give us a comprehensive report of the extent of speech teaching in our American schools. VIRGINIA A. OSBORN.

(34) Cleveland School (O.): Miss Barry writes: "The 3 pupils returned under Query 5 are taught wholly by writing, no signs, no spelling. They receive a very little instruction in speech and speech-reading each day—simply to spare their feelings. They are enthusiastic oralists and insist upon being heard."

(35) Columbus State School (O.): This report is true on general lines, but is not specifically so. J. W. JONES.

(36) Salem School (Ore.): Statistics of June, 1902.

(37) Cedar Springs School (S. C.): Reference only to school-room work.

(38) Sioux Falls School (S. D.): Queries 1, 47; 2, 10; 3, 2; 4, 10; 5, 0; Supplementary Queries 3a, 2; 3b, 0; 4a, 0; 4b, 0; 4c, 0; Signs and spelling are used in all classes in the school in connection with all speech-teaching."

(39) Knoxville School (Tenn.): Of 250 pupils, 72 are taught speech, and are taught *mainly by speech*, the instruction received by *writing*, being excepted of course. THOMAS L. MOSES.

(40) Austin School (for colored) (Tex.): Superintendent Jenkins telephones me the number present April 22 "about 65." No oral work done there. J. W. BLATTNER.

(41) Austin School (for whites) (Tex.): Query 1, 445; including 1 industrial and 4 blind deaf. Supplementary query 4c, 240, signs very little used in school.

(42) Ogden School (Utah): Total, 80 pupils. 13 of these come under (a) Query 4, 34 under (b) Query 4, and 33 under (c) Query 4. 8 of the 33 pupils last mentioned come under Query 5.

(43) Romney School (W. Va.): Query 1, 170; 2, 0; 3, 23; 4, 6; 5, 0. Supplementary queries: 3a, 0; 3b, 0; 4a, 0; 4b, 29; 4c, 0.

(44) Halifax School (N. S.): Queries 1, 96; 2, 53; 3, 10; 4, 0; 5, 7. Supplementary Queries: 3a, All. Nearly all our children have learned to spell on the fingers and while speech and writing is only used in the classrooms, teachers, etc., are permitted to spell to such children as fail to read the lips in workshops, playrooms, etc.; 3b, 0; 4a, 0; 4b, 0; 4c, 0.

(45) San Juan School (Porto Rico): A school of ten pupils under the direction of Mother Fidelas has been established here. Methods of instruction not given.

**The Statistics of
Speech Teaching**

In this issue of THE REVIEW are given the annual Statistics of Speech Teaching in American Schools for the Deaf. As will be seen, there has been a departure from the method of previous years in tabulating the returns from the enquiry addressed to the heads of institutions, Table II giving, in addition to the responses to the main queries, the number of pupils instructed under each of the methods particularized in the supplementary questions. These latter, in addition to providing for a closer and more exact classification of methods, have made possible the correction, in several instances, of the answers to the main queries, wherein, through misunderstanding and evidently with reference to classroom usage alone, principals or superintendents have returned as taught wholly by speech, pupils with whom signs are used in the chapel, workshops, and elsewhere out of school.

The figures in the tables speak for themselves, and their comparative values and their relation to the development of speech-teaching in America are so clearly shown in the diagram on page 300 that extended comment would be superfluous. There are, however, a few points to which attention should be particularly called, or which require explanation.

There are 196 more pupils in schools for the Deaf in the United States in 1903 than there were in 1902. 397 more pupils are taught speech this year than last. 517 more pupils are taught wholly or partly by speech and speech reading. These figures show that the growth in the teaching of speech has been, as compared with the increase in the number of pupils, more than twice as great, while the increase in teaching *by* speech (wholly or partly) has been more than two and a half times greater than the number of admissions for the year. To state it in another way, not only are all the 196 new pupils (or an equivalent number) taught to speak, but 201 of the pupils previously admitted and not taught speech have been brought under such instruction, while 321 more than the number admitted this year, or 120 more than the increase in the number taught to speak, have been transferred from manual to oral classes where they are taught wholly or partly by speech and speech-reading. This means that a much larger proportion of the deaf are being taught

speech than formerly, and that with many more who have been taught to speak merely as an accomplishment, speech is now being employed as a means of instruction.

In the number taught *wholly* by speech there has been an apparent decrease of 175, or 1.9 per cent., but this is explained by the fact that several hundred pupils who were formerly returned as instructed by this method have been placed either, by the heads of the schools, or by ourselves while compiling the statistics in the light of the information contained in the replies to the supplementary questions, among those who are taught by speech and spelling, or by speech, spelling and signs. That this is the true explanation is shown by comparison with other figures, and by the fact that in the diagram the dotted lines continue substantially the lines 4, 5, and 6.

Of the pupils taught wholly by speech in the school-room, (without reference to outside instruction), there is shown the steady, continuous growth of previous years; the increase being 152, or a little less than 1 per cent. A most remarkable change is shown in the number taught in the school-room by speech, spelling, and signs, it having increased within the year from 938 to 1487, (from 8.5 per cent. to 13.2 per cent.). This is a very gratifying showing, representing, as it doubtless does, a change as far as practical from signs to speech with pupils who have previously been taught under the manual method.

S. G. D.

LIP-READING IN THE INDIANA SCHOOL THIRTY YEARS AGO.

The death of Mrs. Sadie J. Corwin, a teacher in the Missouri school for the deaf, has been chronicled in many of the institution papers. Mrs. Corwin was a successful teacher, and a woman of beautiful character and marked intellectual ability. As a young girl, Sadie Crabbs was a remarkable pupil of the writer, especially in a class of lip-readers whose proficiency in that difficult art he has never seen excelled. The class was composed of intelligent semi-mutes. A favorite exercise of this class was the reading aloud of long selections from choice

literature, care being taken by the teacher that the selection was new to the class. The selection was read aloud by members of the class, from beginning to end, too rapidly to be memorized. The teacher, or a member of the class would then read a single verse, or paragraph, which the members of the class repeated from the lips. The same exercise was taken from the lips only, on the following day, as a review. Frequently, for the purpose of drill in lip-reading the words in a verse or paragraph were taken singly from the lips in the reverse order, beginning with the last word. But little time was wasted upon words that proved to be obscure upon the lips. The members of this class read one another's lips and carried on conversation by lip-reading with apparently no effort, and, in the latter part of the first year, anecdotes and short stories were taken from the teacher's lips and from the lips of one another without previous reading, and with but little difficulty. The writer has met many of the best lip-readers in America but he has never come across another class of young men and women so proficient in the difficult art.—Joseph C. Gordon in the *New Era*.

A limited number of bound volumes of the **REVIEW** is offered to Institutions at the following rates: For Vol. I, bound in cloth, \$1.00: for Vol. II, bound in cloth, \$2.00. For prices of other publications of the Association, see advertisement in this number. In order that these latter publications may be placed in the hands of all members of the Association who may not have them, the prices have been reduced to amounts covering little more than postage, and entire sets are offered at \$2.00 per set.

THE ASSOCIATION REVIEW.

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AUGUST FRESE.

O. DANGER, EMDEN, GERMANY.

On the 30th of May, 1900, there died in the country of Pestalozzi, at Riehen, near Bâle, Switzerland, an educator who by his striving after a lofty ideal, by his piety and his self-sacrificing love for the unfortunate, proved himself a genuine follower of Pestalozzi, but who at the same time stood on the firm ground of the realities of life, and who knew well how to till this ground, August Frese. He was born in the north of Germany, at Sievern, District of Lehe, Hannover. The tourist does not find anything attractive in the vast plains of Northern Germany. But as the endless desert produces a powerful impression on him whose eye has been opened to its peculiar beauty, thus it is also with the vast plain. Corresponding to the character of the country, its inhabitants are distinguished by honesty, constancy, strong reasoning powers, sobriety and piety. Frese was a genuine son of the soil, but differing from many of his countrymen in this respect, that his mind was wide open to new impressions, and of these he received many during his lifetime. Called to the care of children from the plow, which he wielded on his father's farm, he left his home in 1859 after finishing a four years' course at the Normal School in Stade. Now other impressions began to exercise their influence on him: the hills, moor and plain, the vast ocean, and finally the lofty mountains. On the seashore a daughter of the moorland, who for several years had aided him in his great work among the unfortunate, became his faithful wife.

Deaf-mute children were Frese's first scholars. But when in 1861 he received a call to devote his energies to the weak-

mind and idiotic, he felt that he must follow this call. He gave up his position at the Royal Institution for Deaf-mutes at Osnabrück, and became a teacher at the Institution for Idiots at Langenhagen, which at that time was in private hands. There he was required to create something entirely new, and he had well grounded hopes that he would succeed by following the only true principle of all education, the family education. In the beginning the founders of this institution showed their willingness to proceed on the lines pointed out by Frese, but gradually, the institution became from a family a boarding school of such large dimensions as to leave no room for the efforts of Frese, the teacher. Thus he saw himself excluded from the grand work of a true educator of the weak-minded and idiotic, and the results of the work did no longer satisfy him. After seven years full of trials, he returned to his former place at the Institution for Deaf-mutes at Osnabrück. But his yearning to be closer to the unfortunates whose service he had made the aim of his life, and to be to them more than a mere teacher, induced him in 1875 to accept the position of Director of the Eastern Frisian Deaf-mute Institution at Emden, which was at that time a private institution. In such an institution there is frequently more opportunity for independent activity than in a government institution. This applied particularly to the Emden institution, and Frese soon showed that he was able to manage affairs in an independent manner. Till the time when Frese went to Emden, Rössler of Osnabrück had been the leader whom he followed; Rössler himself was a follower of Hill at Weissenfels. It is well known how much Hill has done for the education of deaf-mutes; his special merit consisting in this that he brought the education of deaf-mutes into closer relations with the public school system than had been the case in most parts of Germany. It is true that the fundamental principles of general education apply to deaf-mutes no less than to those who are in the full possession of all their faculties, and that in the education of children who are lacking in one or more of their senses greater stress should be laid on these principles and their strict observance than in the education of normally endowed children. But the similarity in the education of normal and de-

fective children extends only to the fundamental principles of education which are derived from psychology and physiology; whilst in practice and in the details there is often a wide difference between the two systems of education. Rössler, as we have stated, was a follower of Hill, and Frese was therefore indirectly a follower of the same leader. But as soon as circumstances permitted him to be more independent, there was for him no longer any blind faith in authorities. More especially did he strongly advocate a direct connection between words and ideas and rejected the intermediary of pictures which have often hindered the immediate union of words and ideas just as signs or gestures had done formerly. Frese's book, "*Streiflichter auf das Gebiet des ersten Unterrichts der Taubstummen*" (*Sidelights on the Subject of the First Education of Deaf-mutes*), is a magnificent work, and it is only to be regretted that it has not been continued beyond the first stage of schooling. But Frese was more a man of action than of the pen—although he knew how to wield the pen in a masterly manner.

Soon after another and important change was to influence Frese's work. In the little village of Riehen near Bâle a small institution for deaf-mutes had been founded half a century ago by "Father Arnold," which, more than any other institution of this kind, was based on family education. This institution had quietly done a noble work for many years, when it was, so to speak, discovered by Mr. Jörgensen, a Danish teacher of deaf-mutes. Frese likewise made a pilgrimage to Riehen and became so fascinated that he spent his entire vacation there. When taking leave of Father Arnold he promised him to continue his work, whenever a call should be extended to him.

This was not done immediately after Arnold's death. The superintendence of the institution was at first entrusted to a man of high scientific attainments but not a specialist in this particular branch of education. But when some time later a call came to Frese from Switzerland, he felt in conscience bound to accept it.

In Riehen Frese might have lived "like the centurion of Capernaum." He had only to say: "Come here! go there! do this!" and his commands were obeyed at once. He might have

spent his days in contemplative leisure like Father Arnold during the last years of his life, and as his immediate successor was compelled to do from sheer force of circumstances. There were men there to guide the helm. But Frese was not cut out for this sort of life. He had esteemed and loved "Father Arnold;" but for the second time it became apparent that he did not know any blind faith in authorities. As soon as he saw that even Arnold's work, like every human work, stood in need of reforms and was capable of being reformed, he firmly took the helm into his own hands.

Now a strange thing took place. Frese, who, in matters of religion had always been a member of the extreme orthodox party, and who has not hesitated to use his pen in warfare against the modern theology, was all at once considered not to possess sufficient piety! just as if truth and clearness were contradictory ideas. But Frese was neither discouraged nor frightened, stood firmly at the helm and continued to stand there. Things which could not be harmonized, must be separated.

Riehen is no longer, what it was years ago, the Mecca of teachers of deaf-mutes. It is far more than this. From a boarding school for select pupils it has, under Frese's direction, become in the true sense of the term an institution for deaf-mutes, in which, however, instruction and family education are as closely connected as is generally only possible in small institutions.

"Excelsior—higher, higher!" thus Frese wrote during the very period of his fiercest struggle to a former colleague, "Above the dust we shall and can wander, above the dust we should teach our little ones to wander, above the dust we already wander when we look into the gentle innocent eye of a little child, and through the eye into its heart, sanctified to the Lord. But our aim is still higher, higher!"

And now Frese has gone up higher, he has gone home! On the 12th of June, 1900, his pupils, fellow-laborers and friends accompanied his remains to their last resting place in the quiet village of Riehen. Although paralysis of the heart brought his life to a premature end—he was only 65 years of age—his life work has not been in vain.



E AS IN SEE.



U AS IN TRUE.



A AS IN ARM.



F AS IN FAN.



M AS IN ME.

SOME SPEECH ELEMENTS, SEEN ON THE LIPS.
(DETROIT DAY-SCHOOL FOR THE DEAF.)

ANNUAL REPORT OF THE DETROIT DAY SCHOOL
FOR THE DEAF, AND THE NORMAL TRAIN-
ING DEPARTMENT FOR TEACHERS
OF THE DEAF.¹

Herewith is submitted the required report of the Detroit Day School for the Deaf, and the Normal Training Department, in their relations to the public school system, together with such explanations and illustrations as may make the work of the education of the deaf more generally understood.

In 1893, the justice of the demand for some means by which deaf children might remain in their homes, and still receive the benefits of an education, was recognized by the Detroit School Board, and a small class was organized under the direction of one teacher. This was soon felt to be inadequate to meet the demands of the large number who wished to avail themselves of its privileges, and efforts were made to extend them.

In the Superintendent's report for 1898, he suggested that legislation be secured by which the city would receive a certain amount per annum from the state for each child attending the school maintained by the city, to enable the Board to increase its capacity; and to extend the same privileges to other cities throughout the state, thus following the example of Wisconsin, Illinois, and Ohio, which had previously established similar day school systems.

The need for such schools was manifested in other parts of the state as well, and the result was the enactment by the Legislature of 1899 of the following "Day School Law":

¹Reprinted from the Fifty-ninth Annual Report of the Board of Education of the City of Detroit.

AN ACT

Authorizing School District Boards, Boards of Trustees of Graded Schools and Boards of Education in Cities to Establish and Maintain Day Schools for the Deaf, and Authorizing Payment Therefor from the General Fund.

The People of the State of Michigan enact:

Section 1. That upon application by a school district board, board of trustees of a graded school, or board of education of any city of this state, to the Superintendent of Public Instruction, he shall grant permission to such board to establish and maintain, and such board shall thereupon be empowered to maintain, within the limits of its jurisdiction, one or more day schools, having an average attendance of not less than three pupils, for the instruction of deaf persons over the age of three years, whose parents, or guardians in the case of orphans, are residents of the State of Michigan.

Section 2. Any board which shall maintain one or more day schools for the instruction of the deaf shall report to the Superintendent of Public Instruction annually, and at such other times as he may direct, such facts concerning the school or schools as he may require.

Section 3. The State Treasurer is hereby authorized and directed to apportion and pay out of the "General Fund" annually to the treasurer of any board maintaining a school or schools, which shall be established in accordance with this act, the sum of one hundred and fifty dollars for each deaf pupil instructed in any such school for nine months during the school year, and a part of such sum proportionate to the time of instruction of any such pupil so instructed less than nine months during each year.

Section 4. The money received from the State Treasurer, as provided in section three of this act, shall be kept separate and distinct from all other funds by the treasurer of the board receiving it, and shall be known as "the fund for the support of schools for the deaf," and shall be paid out for no other purpose than for the payment of salaries of teachers of schools of the deaf, as herein provided, and for school appliances, and all sums not expended under this act shall be returned to the State Treasurer and credited to the primary school interest fund.

Section 5. All teachers in such schools shall be appointed and employed as other public school teachers are appointed and employed. All persons appointed to teach in any such school shall have had special training for teaching, and shall also have had special training in the teaching of the deaf, including at least

one year's experience as a teacher in a school for the deaf. The so-called "oral" system shall be taught by such teachers, and if after a fair trial of nine months, any of such children shall, for any reason, be unable to learn such oral method, then no further expense shall be incurred in the effort to teach such child so unable to learn such oral method in such primary schools.

Section 6. For the purpose of this act, any person of sound mind, who, by reason of defective hearing, cannot profitably be educated in the public schools, as other children are, shall be considered deaf.

This act is ordered to take immediate effect.

Under this law, greater possibilities presented themselves, and two new teachers were added to the Detroit school during the first year. A school was established at Grand Rapids, and since then others have been organized at Muskegon, Menominee, Saginaw, Bay City, and Calumet. Four teachers are now employed at Grand Rapids, and one at each of the other cities.

The demand for teachers trained in the oral method of teaching the deaf has always been in excess of the supply, and it soon became evident that some provision for such training was necessary if the requirements of these schools were to be efficiently met. It appeared, for several reasons, that such a department would be most advantageously conducted in connection with the Detroit school, and in September, 1900, the classes were centralized in an easily accessible part of the city. This permitted the grading of classes, more teachers were employed, and a Normal Training Department was organized. Upon this reorganization the German oral method was introduced and it is now used exclusively with all pupils.

Our enrollment of pupils during the present year has numbered forty-three, divided into six groups, and representing seven grades, arranged according to the course of study of the other city schools, with the addition of special work in articulation, speech-reading, auricular training, and language. The material used, the illustrations, and the manner of presentation must certainly be adapted to meet the special needs of the deaf, but the underlying principles are exactly the same in each case. The cultivation of attention, observation, imitation, expression, and obedience is not peculiar to the education of the deaf alone.

Exercises for the development of the senses of form, color, touch, rhythm, etc., are a part of the curriculum of every well organized kindergarten and primary school. They are even more essential to our pupils, and form an important part of the first year's course.

After completing the eighth grade in the School for the Deaf, our pupils are expected to be able to enter the High School, if they so elect, and finish the course with hearing pupils. This is being successfully demonstrated by our graduate of last year who has this year satisfactorily completed her first year in the High School.

There are now seven teachers, not including the special teachers, who direct the work in art, physical culture, and penmanship; nor those of the manual training department, who have charge of cooking, sewing and sloyd. The normal students also have practice work in the school, especially during the second semester of their course.

The plan of associating the deaf with the hearing children for sloyd and cooking has proven very satisfactory,—a deaf and a hearing child working together. A special teacher accompanies each class to assist the children with the language pertaining to the work.

Cardboard construction with the younger children is carried on by the class teachers, who also assist the special teacher in the girls' sewing classes. Basket weaving, with willow and raffia, was added to the occupations during the spring term. During the coming year we hope to extend and improve this manual training, so necessary to a school for the deaf.

The "Association of Parents and Friends of Deaf Children" has, during this year, held its meetings at the school, where the parents and teachers may be brought into closer sympathy, to their mutual benefit, as well as to the better interests of the children.

NORMAL TRAINING DEPARTMENT.

¹"A Normal Training Department shall be maintained in connection with the School for the Deaf, the principal of the

¹Rules of Board of Education.



PREPARATORY GRADE.

BREATHING EXERCISE.

school to be required in addition to other duties as such principal, to give instruction to students admitted to such department.

REQUIREMENTS OF APPLICANTS.

“Applicants entering the Normal Department shall be required to hold a Detroit teacher’s certificate, or its equivalent, or shall have completed one year of the advanced course of a State Normal School. After having attended the School for the Deaf for observation and practice work for one year, members of the normal class shall be examined in :

1. Anatomy and Physiology of the Organs of Speech and Hearing.
2. Science of the Elements of Speech.
3. History of the Education of the Deaf.
4. Special Pedagogy for the Deaf.

“Upon recommendation of the principal of the Training Department of the School for the Deaf the Superintendent of Schools and the Chairman of the Committee on Teachers and Schools shall issue diplomas to graduates, sign same, and transmit to the State Superintendent of Public Instruction for his endorsement.

“In addition to other qualifications, applicants must furnish evidence of sound physical health.

THE MEMBERSHIP OF CLASS.

“The membership of the normal class shall be determined by the Superintendent and the principal of the school, after the number of students to be admitted for the year has been determined.”

PURPOSE OF THE TRAINING SCHOOL.

The purpose of this department is to furnish teachers, trained in the oral method of teaching the deaf, for the Detroit Public Day School and for other similar schools throughout the State of Michigan.

COURSE OF STUDY.

The course of study extends over a period of one year, and students are admitted in September. During the year they pursue a three-fold course—theory, observation, and practice

work. One recitation period daily is devoted to the former, the remainder of the time being spent in actual observation, or practice in the school-room. The range of the practice is wide, as every grade is represented in the school.

COURSE IN THEORY.

First Semester.

Psychology and Science of Education—

At the Washington Normal, if a satisfactory course has not previously been completed in a normal school.

Anatomy and Physiology of Organs of Speech and Hearing—

Work illustrated by charts, casts, and specimens, and supplemented with lectures by specialists of the throat and ear.

Science of the Elements of Speech—

Acoustics and the General Laws of Sounds—

With special reference to voice production.

Use of Binner Chart.

Second Semester.

History of the Education of the Deaf—

Development of different methods. Methods in use at the present time.

Special Pedagogy for the Deaf, including—

Special language teaching for all grades, illustrating the use of toys, pictures, the "tag exercise," action work, stories, journals, compositions, "five-column slate," and current events.

Sense Training—Exercises for the more acute development of the senses of sight, including form, size, surface, number, color, etc., and touch, including form, size, number, surface, texture and vibration.

Auricular Training—How to test hearing. How to make use of and develop sound perception, if any exists. Actual tests with pupils.

Speech Reading—Special work for the semi-deaf.

Reading—Text and supplementary readers best adapted to the deaf. Library reading for children.

Render Reports on Library Books Read—

This course is supplemented by reading from the Public Library, which has made a special effort to place at our disposal books relating to the education of the deaf, and from our own library, which is constantly increasing.

Results of the course in theory are tested by examinations.

A thesis is also required at the close of each term.

Fall term—Speech Teaching.

Winter term—Some phase of History of Education of the Deaf.

Spring term—Special Language Teaching, or Sense Training.

OBSERVATION AND PRACTICE WORK.

First Semester.

Upon entering, a week's general observation, throughout the grades, is permitted, before students are assigned to definite grades for four-week periods. During the fourth week they may assist the class teacher with minor subjects.

First week in grade—Study of class as a unit.

Second week in grade—Study of an individual pupil.

Third week in grade—Observation of a subject presented by the teacher. Preparation of a lesson plan for the following week.

Fourth week in grade—Teach subject observed, under the supervision of the teacher, and write criticism on the lesson plan.

Observations of the first and second week are directed in different ways, and the results are submitted by means of papers, which are discussed in the normal class.

To correlate with the "Science of the Elements" and "Chart Work under the course in theory, during the second quarter the observation is especially directed to articulation.

First week in the grade—Observation of the articulation of the class as a whole, noting general defects.

Second, third and fourth weeks—Study of the faults of speech of individual children, and means used to overcome them. Preparation of exercises for their correction. Papers discussed in normal class.

Special lessons in speech with beginning classes, or lessons presenting new or difficult combinations, or for overcoming some

particular fault of speech, are arranged for the observation of the entire normal class, in connection with this articulation work.

During the last quarter of this term, students teach, under supervision, at least one period a day, during the second, third and fourth weeks in grades. Subjects taught are such as to especially require articulation work.

Second Semester.

Model lessons, for the observation of students, are given throughout the grades by the principal and teachers, to illustrate all phases of work given under "Special Pedagogy for the Deaf," including "Special Language Teaching," "Auricular Training," "Speech Reading" and "Sense Training".

Preparation of plans and presentation of lessons in geography, history, number, etc.

During the last quarter, students spend one week in each grade, teaching a language period every day. For one day, during each week, she takes entire charge of the class, preparing her own plans for lessons.

Work in physical culture, art, sewing, and basket weaving, with a view of assisting a director, or teaching the same in Day Schools, is carried on throughout the year.

Texts used:

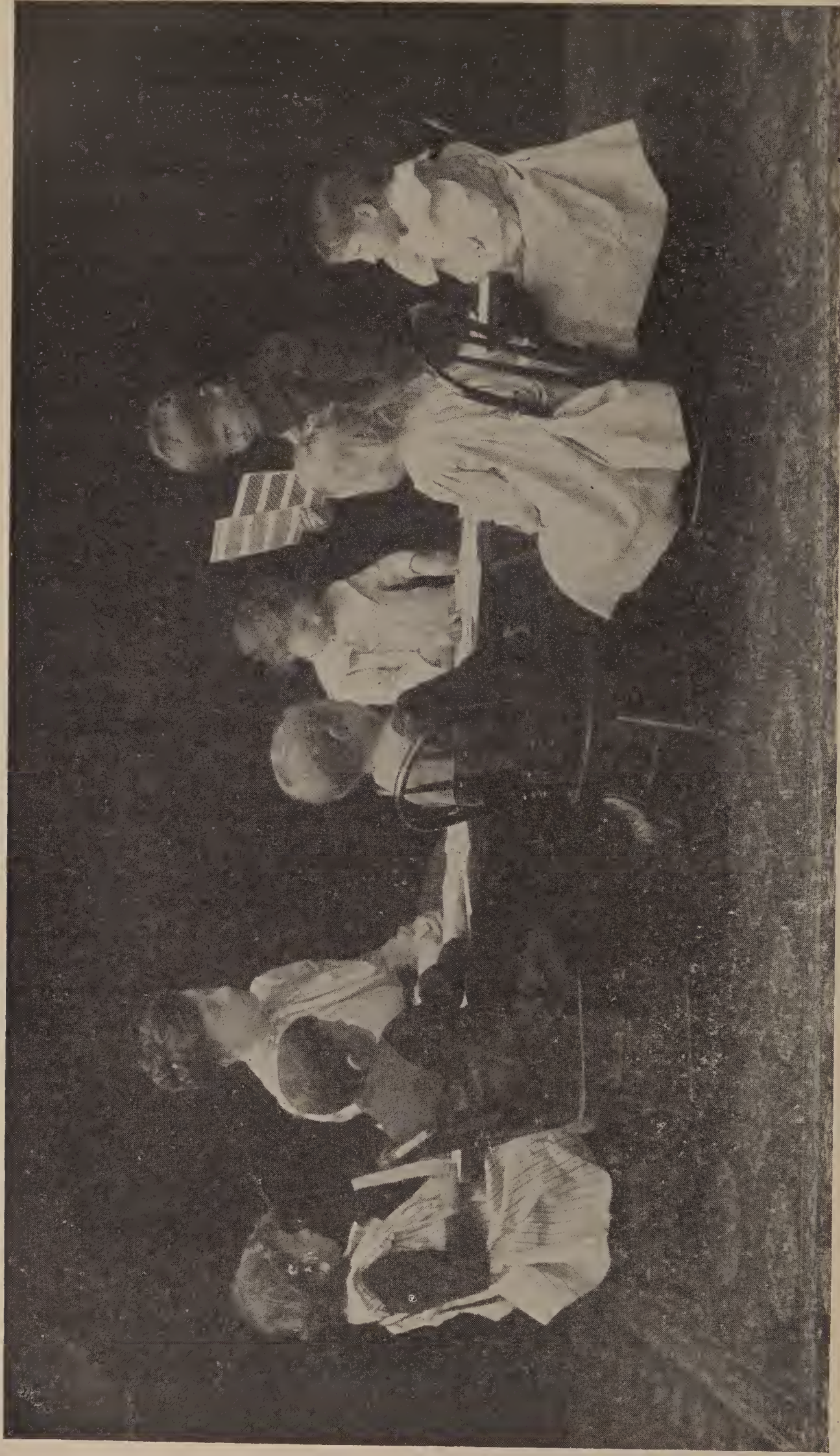
History of the Education of the Deaf	Arnold
Elements of Speech.....	Paul Binner's Lectures
Principles of Speech.....	A. M. Bell
Anatomy and Physiology of the Speech Organs.....	
	Paul Binner's Lectures. Dr. Hewson, in First Summer Meeting Report. Arnold.
Method of Articulation Teaching.....	Paul Binner
Sound	Tyndall
Psychology	James and Titchener
Compayre's History of Pedagogy.....	Payne

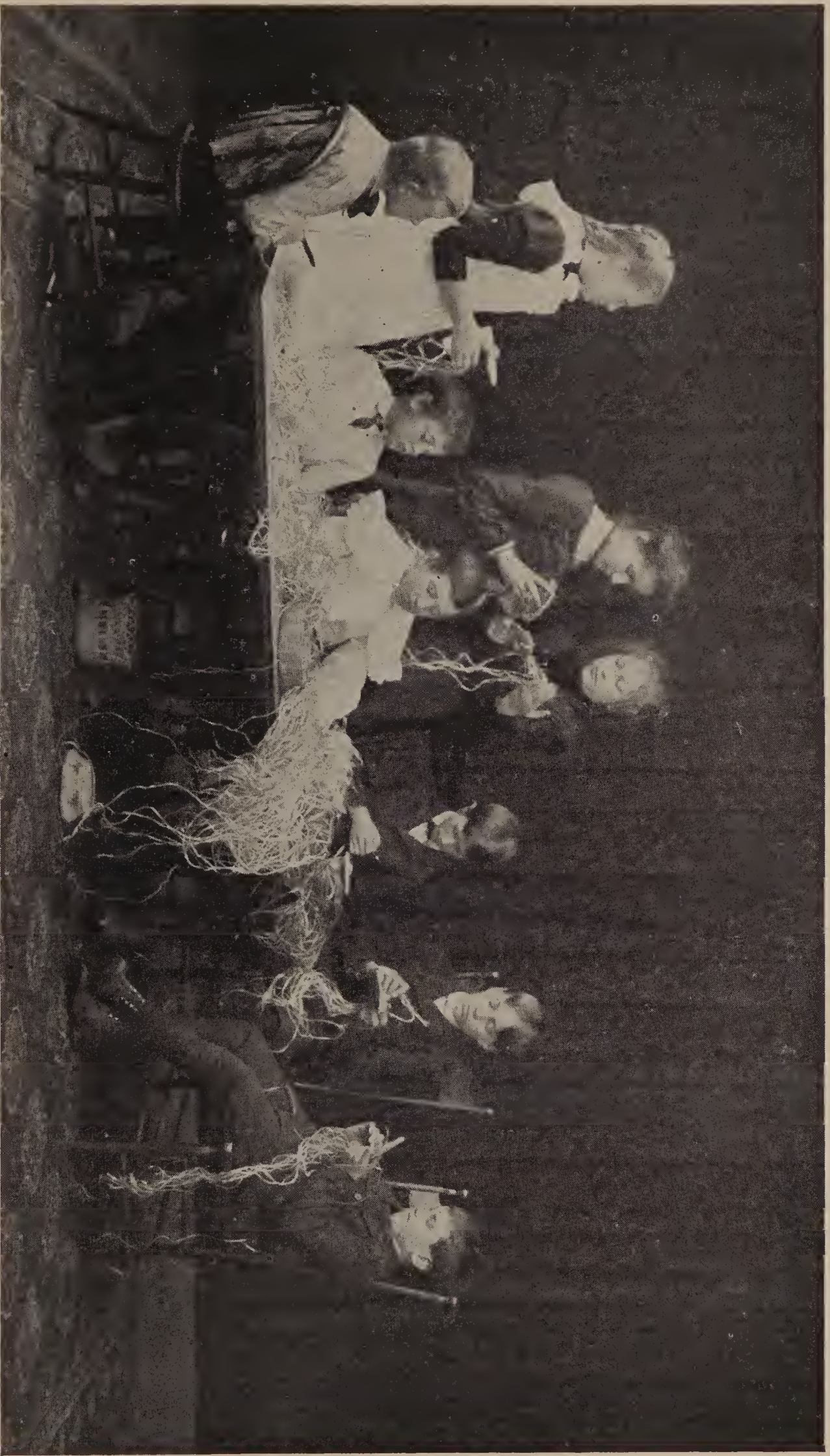
REFERENCES AND COLLATERAL READING.

Annals.
 Association Review.
 History of American Schools.
 Bell's Publications.
 Arnold's Publications.

PREPARATORY GRADE.

SENSE TRAINING.
SIGHT WORK.—MATCHING DESIGNS.





BASKET WEAVING WITH RAFFIA.

Reports of Meetings of the A. A. P. T. S. D.	
The Voice	Warman
Rush on the Voice.	
Gymnastics of the Voice.....	Guttman
Throat and Its Functions.....	Elsberg
Speech and Its Defects.....	Potter
Speech for the Deaf.....	Story
Shut Your Mouth.....	Catlin
Life and Education of Laura Bridgman.....	Lamson
Helen Keller.	
Children of Silence.....	Seiss
Manual of Articulation Teaching.....	Greene
Method of Teaching Deaf Mutes to Speak.....	Bonet
Hand Book of Psychology.....	Sully
Froebel and Education Through Self Activity.....	Bowen
Comenius and Educational Reform.....	Monroe
Herbart and the Herbartians.....	De Garmo
Sub-conscious Self	Waldstein

PREPARATORY TRAINING, ARTICULATION AND LANGUAGE.

Oral language is the principal subject of instruction throughout this course, and all other branches are subordinate to it. Subject matter presented and grading of classes correspond to the hearing schools. Every subject of study, however, teaches the language peculiar to itself, and becomes in a degree, a language lesson. Upon entering the grammar grades, the methods of instruction approach those of the hearing school, till, in the more advanced work, they differ but little.

Our aim must be, through speech, and speech reading, and their association with verbal language, to restore the child, as far as possible, to a normal condition, and place him on an equality with his hearing associates, in respect to their vernacular and literature.

Untrained deaf children are usually very deficient in the powers of attention, observation and imitation,—the three great essentials of education. It is to their cultivation, especially of attention, that the efforts of the preparatory work are directed. These are mental efforts directed and controlled by the will, so that sense experience is made a subject for thought and reflection or directed to some definite end. The greater the number

of these mental images the more certain and precise is our thought. Thus the training of the senses is the foundation of mental education and rational judgment, and the value of preliminary exercises to aid this development cannot be over-estimated.

All mental development is possible through the senses; but with one of the principal avenues (hearing) through which this is brought about, almost or quite destroyed, it is plain that either the mind cannot be developed to its former possibilities, or that the remaining senses must supply the deficiency. We believe that this loss can be to a great extent compensated for by the cultivation of the other senses, particularly those of sight and touch.

This may be best accomplished by a course of muscular, sense, breath and voice gymnastics; and auricular training for those pupils who have any degree of sound perception.

Such a preparation has its advantages in that, from the beginning, the teacher's work is placed upon a scientific basis, and no time and labor are wasted, trying uncertain experiments. The oft-repeated exercises on the elements of speech are the best means of producing in the pupil an instinctive, spontaneous action of his organs; and during the preparatory work the controlling influence which the teacher exerts insures a normal, easy action of the organs, and all secondary or subordinate productions, either as tone or noise, can be eliminated at the very beginning.

I. MUSCULAR GYMNASTICS AND RHYTHM WORK.

1. Imitation Exercises.

Aim—To cultivate attention and imitation.

- a. Class in unison, following the teacher in movements easily imitated, as, walking, sitting, standing erect, sitting erect, head erect, shoulders back, marching, running, etc.
- b. Movements of the arms, hands, feet.
- c. Gymnastics of the face—Opening and shutting the mouth, eyes.
- d. Jaw movement,—vertical, sideways. To secure flexibility of the lower jaw, and a quiet position of the tongue.



PREPARATORY GRADE.

LANGUAGE.
"EVERYTHING HAS A NAME."

- e. Lip apertures for vowels—Without voice—ē, ä, u.
- f. Positions for consonants.
- 2. Rhythm work.
 - a. Develop the idea of time. Study of different kinds of time, as, four-four, three-four, two-four.
 - b. Expression of these with the hands, feet and body-movements. First by counting, then with music.
 - c. Marking time, marching, skipping, calisthenics with music. Particular attention to the accent.
 - d. Application of accent to speech work. As soon as a few elements are taught, give in combination in a series, and place accent, as, fē, fē, fē'. Application of accent to words and emphasis of words in sentences.
- 3. Vibration.

Aim—To distinguish between strings of rapid and slow vibration, applying this knowledge to distinguishing between high and low pitch in voice work.

The study of vibration follows the study of textures and strings. A piano, guitar, zither, or other string instrument may be used. The child places his hand upon the instrument where he can best feel the movement.

 - a. Comparison of high and low pitched strings. With closed eyes, he distinguishes between these two pitches. After he is positive about these, add medium pitches, then others.
 - b. Comparison of voice, felt in the teacher's throat with the vibration of strings.
 - c. Comparison of voice felt in the teacher's throat, with those felt in his own throat.

II.—SENSE GYMNASTICS.

- 1. Form.
 - a. Splint and stick laying. With colored splints or sticks, in imitation of the teacher.

Figure reproduced without the teacher's aid.

Reproduced on the blackboard with crayon of the same color as the sticks.

- b. Textures and designs of cloth, paper, etc.

¹Matching similar textures.

²Matching similar designs in different colors. Materials used—cloths, tapestry, wall paper.

- c. Writing—Tracing and copying, using the blackboard or wide-spaced paper, and soft pencils.

- d. Drawing and paper cutting.

Encourage children to make drawings, however crude, to express themselves. Direct attention to most striking objects, such as animals, with their actions, and let them reproduce with crayon, or, by paper cutting.

2. Form and size.

Recognition by sight, not employing touch.

- a. Of small geometrical solids. A small solid is shown, and returned to the basket of similar forms. A child is then called upon to select it. Various exercises using duplicate models may be introduced, until all the forms are presented.
- b. Surface—Outline form of models. Pieces of thin wood, or cardboard called “tablets” are used in the same way.
- c. Length and size. For length, use splints, or pencils of different lengths. For size, use a set of baskets, or a set of blocks, or balls of different sizes.

3. Form and Color.

- a. Sets of objects which are alike in all respects are used. Matching a red ball with a red ball, a blue card with a blue card. The color chart, using only the standard colors, afterward add tints and shades.
- b. Different materials. Match red wool with red silk, a red dress with a red on the color chart. Find all the red in the room.
- c. Match pictures. “Picture games.”
- d. Water colors. Paint circles, squares, oblongs, etc., without line. Paint to line. Free expression.

- 4. Touch. Recognition by touch, not employing sight. (Blindfold child.)



THE SEWING CLASS.

- a. Recognition of their toys by the sense of touch alone.
- b. Of small solids. Same solids as used under "sight." Give form to the child, allowing him to examine it carefully with his hands. Place among the others and have him select, depending solely upon the sense of touch.
- e. Surface forms. Same models as when surface was studied through sight.
- d. Length and size. Same models as were used before under sight.
- e. To recognize difference in weight. Balls of same color and size, but of different weights are used. Hollow rubber balls weighted with one, two, three and four ounces of shot are good. Blocks of minerals having different specific gravity are also good.
- f. Textures. Same as used for sight. Select one which has been previously examined, from among the others. Match, using touch alone. Use cottons, wools, silks. Different textures, weights and qualities. Also fur. Strings of different sizes and textures.

Number.—Counting and the application of number to objects they know about. To know and lip-read these. "Show me two ears." "Find two chairs." "Minna has one mouth," etc., in connection with language work.

ARTICULATION.

Much of the work in sense training is given as an aid to or a preparation for direct speech teaching, or to lip-reading. The observation and imitation of motion, to final lip and face movements, is a preparation for lip-reading, and the imitation of these is a preparation for articulation, which is begun, simultaneously, on the first day of school.

Breathing Exercises.—Although many of the physical exercises of children make special demands on the breath, they are not sufficient, nor of the nature, to regulate its action for speaking purposes, and special exercises are necessary to gain this power and control. Those who hear and speak have been unconsciously using these forces since they formed the first word,

so their lungs and muscles are highly developed. Deaf children use them only for respiration, and their action is limited.

These exercises are arranged to aid in the development of the lungs, and the cultivation of proper breathing habits ; to teach them to control or economize the breath in speaking ; as an aid in pitching voice ; to give an idea of long and short vowels, and to assist in teaching syllabication and accent.

Exercise I.

- a. Lips closed, inhale, filling the lungs completely.
- b. Hold, from one to five seconds.
- c. Exhale forcibly through the mouth. Blow out a lighted candle. Blow away pieces of paper, graduated in weight, from light to heavy. Blow bits of cotton, wool, or feathers.

Exercise II.

- a. Lips in ē position. Inhale through the nose, completely filling the lungs.
- b. Hold from one to five seconds.
- c. Exhale forcibly through the mouth ; lips in ä position.
- d. Repeat a and b. Exhale with lips in ē position.
- e. Repeat a and b. Exhale with lips in u position.

Exercise III.

To give power to control the expiratory muscles.

- a. Repeat a and b.
- b. Exhale slowly in whispered hä.

Exercise IV.

After a repetition of a and b, the breath is exhaled as in III, but in a loud voice, using first the sound of hä, then hē, then hu. This exercise trains the tongue and the soft palate. The sound of hä requires the soft palate to be held in a raised position and also necessitates a quiet position of the tongue.

The above exercises are used during the first two years introducing No. IV after the pupils can speak the vowels. With very young children or physically weak pupils, great discretion must be used so that no dizziness or fatigue is produced.

With the beginning of the third year these may be added :

Exercise V.

- a. Fill the lungs with three inhalations, taken in succession, with a pause of a second between each.
- b. Hold the breath from five to ten seconds.
- c. Exhale in three expirations, in form of whispered hä.

Exercise VI.

- a. Same exercise, taking six inspirations.
- b. Hold in the same manner as before.
- c. Exhale in six expirations, reserving enough breath to count aloud one, two, three, at the end of the expiration. Not a total exhaustion of the lungs, as it is weakening.

Breathing exercises in connection with arm movements in calisthenics.

VOICE GYMNASTICS.

“From the simple to the complex” is a pedagogical maxim which is nowhere more applicable than in teaching the deaf to articulate. Begin with the simplest sounds, and gradually proceed to the more difficult, until all are mastered. The simplest sounds, selected from the child’s point of view, will be those best seen, best felt, and easiest of execution, since with hearing excluded, he is dependent upon sight and touch.

While all teachers agree that some such order of procedure is necessary in teaching these elements, it is interesting to note that no two children will encounter the same difficulties in the acquisition of speech.

When pupils have gained some idea of attention and imitation, which will be acquired in about a week, this real work of speech teaching should begin. The position for an element is assumed by the teacher; the pupil observes and imitates. Use the mirror for visible elements, and to correct defects; and the sense of touch for concealed movements, and vowels. F and p are excellent for a beginning, as they have definite positions, are easy of execution, and the organs used in their formation can be seen by the child. The effect of the breath can also be seen against a slip of paper, or the lighted candle, which adds to his interest.

The succession in which the consonants are presented, is based upon physiological laws governing their production,—from

the simplest to the most difficult. Sometimes, however, in attempting one speech element another is perfectly given; it should be accepted and given its proper association, though, generally speaking, one element is mastered before another is attempted. L and r usually present some difficulty, and should be reserved until more control is obtained by a mastery of the others. Because of the nasal effect of n, m, and ng upon the vowels, it is well to place them also, after considerable drill upon the others.

In the preceding imitation drill, the pupil has had the jaw movement, securing flexibility of the lower jaw, and lip positions for ē, ä and u, securing mobility of the lips. Both exercises are designed to teach a quiet position of the tongue, with the point resting against the lower part of lower front teeth, and the ability to hold it, which is so essential for round clear vowels; ē, ä, and u are the extreme positions in vowel formation, the shape of the resonator being longest in u, shortest in ē, and with the widest vertical opening in ä. All the other vowels will find their places in a modification of this resonator, between ē and ä, or between ä and u, and are easily acquired after them.

In placing a child's voice, in this vowel teaching, much depends upon the critical ear of the teacher. The exercises in vibration, rhythm, and breathing have been found especially helpful. The pupil feels the vibration in the teacher's throat, and also in his own, modulating his voice to a natural agreeable key. Here the physical condition of the child must be taken into consideration,—a weak child will have a higher pitched voice than a strong robust one.

After all the class can speak and lip-read an element, it is associated with its written form, and placed upon the board, and also upon the drill chart, which is compiled by the class as the elements are learned. As soon as an element is learned it is put in combination with one already known, and drilled. Consonants are combined, also vowels and consonants, placing the accent as soon as repetition in succession becomes fluent, as pä', pä, pä; fē, fē';bä',bä. Accent is applied to words of more than one syllable, and accent or emphasis applied to short sentences.

These elements with their combinations should be mastered in from four to six months. The aim in this early articulation

work is to give, not only the elementary sounds and their combinations, but to attain such a degree of fluency in their execution, that later, in the presentation of new words and ideas, but little time is required for articulation drill.

AURICULAR TRAINING.

Test of pupils.

1. To ascertain if a pupil has hearing, or even sound perception. By means of bells, whistles, piano, tuning fork, or voice.
2. Degree of hearing—Ability to hear vowels,—if not able to distinguish between them, ability to tell how many times each was sounded.

Training.

1. To associate sounds with objects, as the bell with its sound, the whistle with its sound, voice with throat vibration, etc. Let the child see the object, and know that the sound is made.
2. To recognize the sound through the ear alone. To know the number of times it is given.
3. Without seeing, to distinguish between two sounds previously learned. To distinguish all sounds learned.
4. (a) Using ē, ä, u with tubes. (Sometimes a child will hear one and not the other.) Add the other two, and then the other vowels.
b. Teach known words containing these vowels. (Known on the lips.)
c. Teach known sentences.
d. Voice modulation in sentences.

Marked results in ability to hear have been gained during the last two years. Some children, who had sound perception, but who were not at that time able to distinguish between the sounds of a bell and a whistle, have, under training, developed so that they are now able to distinguish vowels. Others, whom we found could hear voice, but could not speak or distinguish vowels or words, can now hear words which they have learned, when spoken very loudly.

In all these cases, speech teaching, and thus the proper association of sounds with the muscular movement, as well as with the idea, has been a very important factor in auricular development. The children in these cases hear what they have been taught to speak. The effect of even a little hearing soon manifested itself in increased ability to modulate the voice, and we feel that much improvement may be made in this direction. We hope, during the coming year, to make more accurate tests, and secure a more complete classification.

LANGUAGE.

“Develop speech in a deaf child in the same way that nature does in the hearing child.”

In order to better understand the treatment necessary to obtain this development, let us take a brief glance of the condition of the two children during the five years prior to their entrance upon school life.

The hearing child, during this time, lives in a world of sound and speech. A child is a natural imitator, and he has the best of teachers—his mother. All the favorable relations and circumstances of domestic life furnish material for the first lessons. She does not trouble him with grammatical rules, but after using all the material within doors, the streets, the people, the shops, the country, become subjects of living language lessons.

“To amuse, to astonish, to delight, are her methods of provoking inquiry, and a thousand questions are asked and answered. Then as occasions for repetition are constantly recurring, the learning of language is steadily advancing. He learns also from the almost uninterrupted flow of conversation around him, much of which, although not intended for him directly, interests and instructs him.”

When such a child enters school his teacher finds him already provided with language acquired in the home life, and able to express his simple ideas and wants. He has also a store of experience and outside information. They have a common starting point from which the teacher perfects this language and

proceeds to special instruction. Even if such a child never enters school he is, in a way, educated by this constant use of language.

And what has the little prisoner of silence been doing during these five years? He also is an imitator, and imitates what he sees, the motions around him. As a result he presents himself as a candidate for knowledge, destitute of verbal language, using in its stead a few rude gestures of little intellectual value. He is familiar with and perhaps tired of toys and objects of which he does not even know the names. He is generally not understood by the people around him, and is not infrequently subject to violent outbursts of temper because his experience has taught him that by this means he has commanded attention, and obtained what he desired.

The deaf child knows nothing of the direct relation of names to objects as learned intuitively by the hearing child, who at once imitates and applies them. The first conception he has of language is when he realizes that everything has a name. He then learns that the forms produced by the lip movements of the teacher, the articulate word spoken by himself, and the written form mean the same as the object or action itself. During this period, slips of cardboard bearing the printed and written names are attached to all the objects in the room including the toys, and this list is gradually increased until it includes everything he uses. By a process of repeated association he comes to recognize the lip movement and the name on the slips as representative of the object itself.

Although objects in their variety of form and color are interesting to these children, action is still more so, and this is made use of at once. Commands such as come, go, walk, run, are given and executed by the teacher, and movements imitated by the little pupils until they associate the spoken word with the action. He also learns his own name and the names of his classmates, and such common expressions as are incidental to his demands for language, or to express his daily wants.

When a number of objects and actions are known, the construction of the sentence is begun, using still the direct associa-

tion of objects and actions with words. ¹Five slate boards are used, or one board is ruled into five sections. The first represents the subject of action, the second the action, the third the object, and the fourth and the fifth the phrase. You will understand how exciting and real this may be, when you know that not only the names, but also the objects themselves find a place in these columns, while the actions are executed. This lays a foundation for logical thinking. They see at once if a member of a sentence is missing, and learn to think in complete sentences. With this as a basis, the plurals, the pronouns, the tenses, capitalization, punctuation, etc., will be introduced as the necessity for expression demands them.

“Everything can be used to teach language.” Every study, every lesson presents its own vocabulary and language forms. Every event is an opportunity for a living language lesson which the wise teacher never neglects. Special opportunity for this spontaneous expression is provided in the conversation period, where the pupil may tell about things most interesting to himself, and for his often imperfect expression, good idiomatic English is given. Usually these forms reappear in the journals which the pupils are taught to keep, showing that the perfect form has been made his own.

No subject in our school is receiving more attention at present than the teaching of language, and it would require too much space to give a detailed plan of the many phases under which the subject is treated.

“Our children enter school at four or five years, destitute of speech or language. Word by word, sentence by sentence their vocabulary is acquired and the simplest elements of construction are learned, till the teachers are able to talk to the deaf child as the mother does to her hearing child, but the deaf child will have reached the age of six or seven years. As the time is thus shortened, we cannot always wait for the favorable occasion to present language, as the mother does, but must sometimes create the occasion to suit the limited time. As we are obliged to find out the quickest way to put them in possession of

¹Miss Barry's plan.

GRAMMAR GRADES.

RHYTHM WORK.



this language, we must anticipate nature, and collect and arrange objects and incidents which will best set forth the principal phases of this wonderful life of ours, and all this in the form best suited to these children."

In closing permit me to acknowledge the hearty appreciation by myself and teachers of the substantial support given by the Board of Education, and of the interest taken by the public generally. Our thanks are also especially due to you, for your counsel and co-operation, which have been such important factors in our success.

Very respectfully,

ELIZABETH VAN ADESTINE.

Principal.

DEPARTMENT OF SPECIAL EDUCATION OF THE
NATIONAL EDUCATIONAL ASSOCIATION—
REPORT OF THE PROCEEDINGS.

The meetings at Boston of the Department of Special Education,—commonly called Section XVI—of the National Educational Association, were this year conducted on the plan adopted last summer at the Minneapolis meeting. This was that the educators of the deaf, the blind, and the feeble-minded should have a common session instead of each a separate one as was done formerly, and that the subjects treated should be confined to those that would be of general interest. There were two sessions, held in the First Baptist Church, on the mornings of July 8 and 10. Mr. Edward E. Allen, of the Pennsylvania School for the Blind, at Overbrook, was president, and Miss Sarah Fuller, of the Horace Mann School for the Deaf, at Boston, secretary.

At the Wednesday session about 200 were present. Mr. Allen opened the meeting by briefly pointing out that our work of teaching the deaf, blind, and feeble-minded was educational and that the questions which might be discussed in our section might with just as much propriety be treated in the other sections of the N. E. A. Nevertheless the work of teaching children with defective faculties presents so many questions which would help teachers in training normal children that they are worthy a full and proper discussion such as could not be found for them in the other section meetings. This section justifies its being if it brings our teachers into close relation with the hosts of general teachers who gather at such a convention. The teachers of our section represent three classes of children. As we have severally our own special conventions where we may discuss our own peculiar questions, the topics discussed here should be such only as are of general interest to all, and they should be discussed in a spirit of absolute good fellowship. We all suffer from the em-

phasis the public is wont to put upon the "charity" side of our work. Here is a chance to bring out the fact that our work is educational. Let us work together cordially to this end.

It will be seen that the topics for papers and discussions, and the speakers, were chosen with special reference to this point, and to showing the relation of our work to general education.

Mr. Frank H. Hall, ex-superintendent of the School for the Blind at Jacksonville, Illinois, was called upon for the first paper upon the subject: *The Influence of the Study of the Unusual Child upon the Teaching of the Usual*. Mr. Hall said briefly:

Strictly speaking every child is unusual as its individuality develops and there is no "usual child," no "average child"; but there are classes of unusual children, made so by a common defect, like the blind, the deaf, and the deaf-blind, and a study of them may become a source of unusual helpfulness in the teaching of normal children. The influence of such study upon the teaching of usual children has so far been small because little attention has been given to it. In the case of the blind the work has not been understood to be similar to that of educating the usual child, but has been considered "wonderful" and "marvelous."

The necessity of a sense-basis in the educational process is conceded by all. Thought deals with the images of things perceived through the senses, then with imaginative creations. "Emancipation from bondage to the things of sense" is necessary in sense-training, and too much time in the training of the normal child may be devoted to sense-perception. This mistake might be avoided could the educator understand just how much each of the senses contributes to the necessary working sense-basis.

Observation of the "unusual child" is instructive here. From the blind child we learn what seeing contributes; from the deaf, what hearing contributes. Comparison of the blind and the deaf with normal children and with each other, leads us to this conclusion:

The sense-perception basis is narrower with the blind than with the deaf or the normal. Thought-power seems to be in inverse ratio to the amount of sense-perception. But sense-perception often contributes to earning power. In scholarship the deaf are, as a class, far below the blind. In power and in disposition to earn, they are the superiors of the blind. Too much time devoted to sense-perception with the usual child will make him like the deaf child, quick to see with the natural eye, but not profoundly thoughtful, hence incapable of the higher appreciations

and enjoyments. Too little time devoted to sense-perception with the usual child will make him like the blind, "narrow" and "bookish," incapable of using his knowledge for the good of others, incapable of earning enough to provide for his physical wants and for such material necessities as make the higher intellectual life desirable and possible. Balance must be maintained, particularly in the first years of school, between eye and ear training.

This section can do a great work by bringing together teachers of subnormal children and others interested in the more important problem of determining educational values in the training of normal children.

Mr. George E. Johnson, dean of the Irving School, University School, Cleveland, Ohio, followed Mr. Hall, thus,—

What pathology has done for psychology, doubtless the study of defective children can do for the understanding of the normal child mind. In the study of defectives, we examine, as it were, a section of the mind. Here faults are written in the large. By the process of subtraction we see, in the case of the deaf or the blind, what it is that the mind receives through the several avenues. We understand more clearly the relation of sight, hearing, and touch, in instruction and the acquisition of knowledge, and we are enabled more wisely to select and apply methods in school work.

Evolution and physiological psychology are the key words to method in the new education. To the teachers of defectives, we are largely indebted for the theory and practice of physiological education, dictated first by Rousseau, Pestalozzi, and Froebel, first successfully practiced by Periere, De l'Epee, Itard, and Seguin.

The types of the unusual child are many. But we consider here the three great classes, the deaf, the blind, and the feeble-minded. The deaf are less emotional, less sympathetic, less altruistic than the blind or the normal. Music and the voice, by which the feelings are best expressed, do not appear in the world of the deaf.

A comparison of the achievements of the deaf and the blind seems to show an intellectual superiority on the part of the blind. Since the eye is the most important sense organ, being the medium of the great majority of all our sense impressions, and the organ most relied upon in education, this fact seems rather startling. The ancients who classed the deaf with idiots, but had more regard for the blind, attributed the mental deficiency of the deaf to their (supposed) inability to acquire language. The ancients were not wholly wrong. What intellectual inferiority

there may be on the part of the deaf is due largely to deficiency in language power. Language is the vehicle of thought and is essential to the development of a high degree of intelligence.

The deaf are observing; they see much, reflect less. The blind have far fewer sense impressions, but make more of them. They are thrown back upon reflection.

A grave doubt arises as to whether there is not an excessive use of the eye in the training of normal children, whether we have not swung too far away from the use of the ear for the good of the child's intellect and soul!

The study of feeble-minded children presents entirely different conditions from those of the deaf and the blind. The feeble-minded child has all the avenues of the normal child. The difficulties are of centralization more than of avenues of approach. The difficulties encountered in teaching the normal child are met greatly magnified in the feeble-minded. The teacher of the feeble-minded has been forced to the physiological method. He has emphasized more than anyone else the value of object teaching, of sense training, of hygiene, of individual attention. He has found that all he does must be done in accord with certain established facts of evolution and in harmony with the laws of physiology. The education of the feeble-minded has emphasized the value of play in education, and demonstrated the necessity of adapting instruction to the stage of development of the child.

The study of the unusual child has put the individual child in our midst; has made for sympathy; has disclosed the seat of the difficulty, showing that supposed stupidity was often the result of defect of eye or ear; has emphasized the value of play and spontaneity in education; has helped to fix the relative importance of the several senses in education; has emphasized the importance of sense training; has practically created the physiological method; has made clearer the application of evolution to education; has kept in the foreground the social object of education, rendering the helpless, helpful members of society. The schools for unusual children present the best object lessons available to the teacher of normal children.

In the absence of others speakers appointed on the programme, the discussion of the papers was confined to Dr. Francis Burke Brandt, professor of pedagogy, Central High School, Philadelphia, and to Mr. Charles F. F. Campbell, of South Acton, Mass., a former instructor at the Royal Normal College and Academy of Music for the Blind, London, England.

Dr. Brandt said in substance:

Speaking from the point of view of the training of the normal child, I believe that the study of the unusual child has already produced an influence upon the teaching of the usual child that is illuminating, instructive, and inspiring. In the first place, such study has demonstrated the almost infinite possibilities of education. Sometimes in our public schools we are in danger of turning away from children because they are dull or stupid or incapable of being taught. But one Laura Bridgman, and one Helen Keller, have taught us more than all our child study investigations put together, that there is an avenue to every soul. Such cases have taught, too, the larger lessons that the twentieth century must regret the nineteenth century dictum of the survival of the fit to put in its place the higher principle of fitting to survive. In the second place, such study has demonstrated the superior effectiveness of special methods and special teachers to accomplish ends which meet the individual needs of the child. In connection with this subject such studies as superintendent Hall's point out the relative value of the senses, as well as the importance of ultimate emancipation from the senses, together with the necessity of training for some form of social service, and that all this can be of incalculable worth in revising our methods in handling the normal child. Again, such study has been highly illuminating as to the importance of right conditions in training a child. The favorable conditions which prevail in many institutions for the special training of special children, the fewness of pupils assigned to teachers, the assignment of special subjects to teachers, the adequacy and adaptability of equipment, and the respect, sympathy, and resources of trustees, have important lessons for those in authority who administer the training of the normal child. Summed up, the study and training of the unusual child have rendered the greatest service to the elevation of the individual and the progress of humanity to the extent that it shows that there is no depth scarcely of physical, intellectual, and moral defect on the part of the individual which the impulse of Christian motive, the intelligence of modern science, and the energy of civilized society combined cannot reach.

Mr. Campbell continued the discussion as follows:

With the blind it is necessary to begin at once to prepare for remunerative occupation. The normal child needs a similar system and has greater opportunity, having a larger field open to him. That he needs immediate training for all possible ends, not for higher education only as at present given, is shown by the figures in the state school reports. Only an extreme minority con-

tinue higher education after the high school, indeed a large percentage of grammar school pupils do not enter the high school.

Example of a pupil at the Royal Normal College and Academy of Music for the Blind, London, England: With a blind child there, it is recognized at once that there is to be a struggle for a livelihood. The child starts his training with the assumption that he may ultimately go to Oxford or Cambridge, to be possibly a lawyer or a minister. Before ten years of age, however, he is started in music, for that profession offers the greatest opportunities for the blind. Thus the possibility of failure in one direction is provided for in another. Before the child is fourteen years of age it is generally clear whether a legal, ministerial, or musical profession is advisable, but all this time he has had the best of manual training so that, if these more advanced mental professions do not promise, his attention is concentrated upon a calling requiring manual dexterity. Thus every contingency has been provided for and in ample season.

Application of this to the seeing child: The large majority, owing to family circumstances, must go to work in some factory or store by fourteen years of age. Since many must work thus early, the public schools should provide preparation for this, as well as for higher education. Clear thinking is needed in the best work, even of manual labor, for it is not human machines that are required but artisans. If public schools offered such commercial and technical training, parents would strive to maintain their children longer in school to avail themselves of an education having so practical a value.

The ideal should be held out to the pupils that because they cannot go to college a great and useful career is not closed to them but rather, by careful application to some congenial art or craft, they may become designers and creators. The supreme end of education will thus be to make them better citizens and, as president Eliot has said, more able to enjoy life.

Topic II —*Should the Scope of the Public School be Broadened to take in all Children Capable of Education, and if so, How should this be Done?* was to have been opened by Dr. Alexander Graham Bell. Dr. Bell was, however, ill and forbidden by his physician to leave home at the time. This was a source of great regret to the president and to the audience. Miss Mary C. Greene thereupon presented her paper. Miss Greene has devoted her long life to the cause of the blind, having been 28 years in charge of the classes of blind children in the Board Schools of London. The

paper was full and practical, and the author gives the following summing up:

Cripples, the deaf, and the feeble-minded in large cities, may receive their whole education under the public school system, each group by itself in centres which may be quite apart from the ordinary public school, the feeble-minded and the deaf requiring specially trained teachers. The blind may be taught by a special teacher, at a centre closely connected with a public school in the instruction of which they can participate for a part of each day. They must be transferred from the public school to an institution for the completion of their training.

The topic was discussed in four short papers. Thomas D. Wood, M. D., professor of physical training, Teacher's College, Columbia University, N. Y., spoke the following thoughts:

The ideal of education to-day is that it shall prepare the individual for human society and citizenship. In our country the state demands that everyone shall have a certain amount of education as a safeguard to the community, and it undertakes to provide this amount of required education and more for those who desire it. It would be most natural and economical to have all educable children who are to be taught at public expense live at home and attend public school. Generally speaking the child should not be separated from his home both for his own sake and the sake of the indirect influence of outside educational forces upon the home; but facilities should be enlarged to take in all except such as could only be educated in institutions. Children deficient mentally and morally, yet capable of being trained to be self-supporting and desirable members of society, should be separated from these children in special schools like the *Hilfschule* of some European cities. The deaf and the blind should be trained in special schools and live at home if possible up to the age of adolescence, when they may complete their training at special institutions maintained by the state. The instruction of all unfortunate and deficient children, whether done at public or private expense, should be under public supervision.

Miss Ellen Le Garde, director of physical training in the Providence Public Schools, including classes for backward children, continued the discussion with a paper of which the following is an abstract:

1. The city of Providence, R. I., in 1894, opened three schools for mentally backward boys and girls. Their success justifies the belief that the public school system in all large cities should be broadened to include all such deficient capable of any improvement.

2. Feeble-minded children and those of physically arrested growth are to be found in all school buildings. Duty of physical director where medical inspector does not exist, or of principal where physical training is not provided, to remove deficient to special schools, to be educated more carefully along slower lines of progress.

3. Germany the pioneer, 1863; Norway, 1874; England, 1892; Switzerland and Austria later; Prussia since 1880 maintains special classes for mental defectives. Obligatory in towns of over 20,000 population. Duration usually six years of attendance. Proportion of school population in England and continent 1 per cent.

4. Providence the pioneer in America in 1894. Boston, Chicago, and Philadelphia in 1899. Providence has three schools incorporated in school system, maintained by school funds. Average to a teacher, 15 pupils. Children educated thus either returned to the regular schools, or remain during school life, being trained for self-support or, if absolutely necessary, sent to an institution for defectives.

5. Methods of instruction. Plan of education: the three "R's," Language, Geography, Singing, Drawing, Gymnastics, Manual Training, i. e., sewing, basketry.

6. Cost about \$5 per month per pupil. Teachers marvels of tact, patience, and perseverance. All trained in Providence schools and graduates of same. Schools under care of special supervisor.

7. About 80 per cent. of children cured. Majority go to work. Made self-respecting, clean, mannerly, young men and women. Not a menace, but source of good to the community, justifying the effort and expense.

8. Future of schools. Medical inspection necessary of daily schools to determine deficient. Daily medical inspection about to be inaugurated. School lunch to be provided. Hope to centralize the three schools in one and pay transportation of pupils. Provide extension of manual training, proper work rooms, and extension of physical education in well equipped gymnasium.

Mr. John T. Prince, agent of the Massachusetts Board of Education, was the next speaker. The following is an abstract of his paper:

Public school education is constructive in helping to create high ideals and intelligence, and preventive in helping to hinder pauperism and crime. It is a wise provision of statute law for the upbuilding of society and for the happiness and usefulness of individuals that every normal child shall be assured of a common

school education. It is no less the state's duty for its own protection to make obligatory the training of educable defectives and the care of those who are not capable of improvement. This training and care should be carried on either in institutions under the direction of the state, or directly in connection with the local public schools.

Those children only who do not need institutional treatment should be trained at home in separate groups. For the cities and large towns this will not be a difficult matter as has been shown by experience. For country districts provision may be made for carrying children to a central school, or for establishing small home schools in convenient localities. These schools should be under the charge and superintendence of the local public school authorities. In states like Massachusetts where district supervision prevails the schools may be under the direction of the superintendent and district committee, the expense of the schools being borne by the towns from which the pupils come. In country districts whose unit of government is the county, the schools may be organized and controlled by the county board and county superintendent, and the expense of carrying them on will be borne by the county.

It is therefore right and feasible for all educable children to be included in the scope of the public school system and to share its benefits and obligations. It is also right and feasible for the state to place all educable children of a certain age under the statutory requirement of compulsory school attendance to the end of giving all its citizens the benefits of intelligence and self-support and of guarding itself and society against the dangers of ignorance and crime.

Dr. Walter E. Fernald then spoke. Dr. Fernald is superintendent of the Massachusetts School for the Feeble-Minded, at Waverley. He said in brief:

Until recently it was thought that feeble-minded children could be educated only in special schools, and these schools were regarded as strictly educational. The methods used in them were radically different from methods then in use in schools for normal children. They corresponded to the methods of education developed by the introduction of the kindergarten idea. Properly equipped teachers could then not be found outside of the institutions.

Special day school classes for the feeble-minded have been in existence twenty years in Europe and they should now be established in all large centres of our country. Parents with comfortable homes prefer such classes. Many parents who will not

send to an institution will send their children to day classes. With the existence of such classes all these children would be under training earlier than they now are. These classes can be quickly organized, do not involve large expenditure of money, and the expense is assessed on the community receiving the benefit. The special classes of London may well serve as models. The children should be selected under expert medical advice and should not be imbecile or idiotic. Their training must begin on a lower plane than the lowest grade of the public school. Physiological education of the special senses and training of the muscles must prepare the way for intellectual training. Progress will be very slow and gradual.

The study of the life history of feeble-minded persons, however, shows facts which must not be ignored. All degrees of mental defect are the results of defect or inferiority of the brain, *and no such person is ever "cured."* A certain small proportion may become "self-supporting, but not self-controlling." By far the greater number need oversight and supervision as long as they live. A very large proportion of them eventually become public charges. The brighter class are easily influenced for evil and are likely to become prostitutes, vagrants, or petty criminals. They should be protected from their own weakness and the cupidity of others. Especially should they be prevented from marriage and the reproduction of their kind. Feeble-minded children may be tolerated in a community, but it is a great responsibility to inaugurate a plan which does not withdraw the defective adults.

There being a little time left Mr. B. Pickman Mann, of Washington, the son of Horace Mann, was asked to say a few words. He responded by assuring the meeting of his interest in the morning's proceedings and the profit he had derived from them; in fact, he continued felicitously, that as he listened to the papers and the portrayal of the scientific care and equipment given to the training of special children, he considered not so much how the public schools should be broadened to take in the special schools, but how the scope of the special schools might be broadened to take in the public schools.

The papers and discussions of the morning being at an end the president announced as committee on nominations, Messrs. A. L. E. Crouter, F. H. Hall, E. A. Fay, G. E. Johnson, and W. E. Fernald.

The Friday morning session of the department opened with a paper by Dr. Edward A. Fay, vice-president of Gallaudet College, Washington, D. C., and editor of the *American Annals for the Deaf*, on Topic III, *How can the term "Charitable" be justly applied to the Education of any Children?* The following is an abstract of Dr. Fay's paper:

The earliest American schools for special classes were established on the model of British schools. The British schools were founded and maintained entirely by private charity and, like all English free schools of that day, were regarded as charitable institutions. But in America free schools were not so regarded. The duty of the state to provide education had long been recognized, and as soon as the special schools were established they applied to the legislatures for support on the ground that their children had the same right as others to education at public expense. The justice of this claim was recognized and the state paid a *per capita* rate for the pupils in attendance. This arrangement still continues in a few of the older states.

So far as the education of pupils is paid for by the state it cannot be called charitable, for the state has no right to dispense charity. But if we consider these older schools from the point of view of their origin, their corporate character, and their endowment, they may be classed, legally at least, as charitable institutions. The same is true of our incorporated colleges and universities; in the eye of the law they are charitable institutions. But the legal sense is not the common sense; in the popular conception the idea of charity is not associated with colleges and universities; they are regarded as educational institutions, because their purpose is educational. Our special schools are also educational in their purpose and there is no more reason for regarding them as charitable than for so regarding colleges and universities.

What has been said of the charitable character, from a legal point of view, of special schools applies only to a few of the older states. The great majority of American schools for special classes are public schools established by the state legislatures and maintained wholly by public taxation. There is no reason whatever for regarding them as charitable.

In nineteen states the special schools are classed by the state authorities as purely educational, and in twenty-two as charitable or partly charitable and partly educational. Even in those states where they are rightly classed the popular conception lags behind the official recognition.

One reason why the unthinking public is slow to recognize the true classification is that the unfortunate names of asylum and

institution still cling to the schools, though in many states they have been officially abandoned.

Another reason is that the state provides food and shelter as well as instruction. But this is not done as an act of charity, but as a necessary incident of education. It is more economical than to provide instruction for the children at their scattered homes. If the food and shelter were a charity, the state would have no right to give it.

The heads of schools are sometimes responsible for the erroneous classification to some extent, when they welcome the assistance of boards of charities, and when in asking support from legislatures they appeal to motives of charity rather than of justice.

The effect of applying the term charitable to the education of any children is (1) to give the general public an erroneous impression of the character of the work; (2) to create in the minds of parents a prejudice against the school and sometimes deter them from sending their children; (3) to humiliate and embitter the pupils, or to degrade and demoralize them.

The latest state to place its school for the deaf and the blind in the purely educational class is Virginia. The superintendent of that school says that the result has been to increase the attendance, awaken the interest of the public, arouse the ambition of the pupils, and produce better work in school and shop.

The topic was discussed by Mr. Wm. B. Wait, principal of the New York Institution for the Blind, New York City, in a paper of which the following is an abstract:

This question presents three of the most important words in the English language: *children*, "For of such is the kingdom of Heaven"; *education*, the salvation of children and the hope of mankind; *charity*, greater than hope, and better than faith.

The basic idea presented is that of classification. Right classification is a condition necessary to good results. Wrong classification gives imperfect results. Right classification is necessarily scientific and helpful. Wrong classification is necessarily unscientific and harmful. Concretely, classification may be represented by the base of a right-angled triangle; method, by the altitude; and results, by the hypotenuse. If classification be correctly extended and methods be poor, the side showing results will be disproportionate and inadequate; likewise, if we have wrong classification and our methods be absolutely correct, still the side showing results will also be disproportionate and inadequate. Furthermore, error in classification will inevitably produce error in method.

It should be observed that the proposition before us refers to no special class of children, but to all children: to those of the rich and of the poor, the normal, abnormal, and subnormal, the vagrant child, the idiotic child. Can the term charitable be properly applied to the education of any of these children?

If a certain stone be improperly classified as good building material and be used in the construction of a house, it will make no difference to the stone, but may be of vital importance to the occupants of the house. If a farmer classifies his cow as a butter maker when its milk should go to the cheese factory, it is of no importance to the cow, but is of importance to the farmer, and to the butter or cheese factory. When, however, children of any class or condition are improperly classified, the inevitable resulting loss must first fall upon them, and as both by nature and by law they are incapable of self-defence, it becomes the duty of parents, teachers, and of the administrative agencies of the state, not merely to shield them from physical harm, but to protect them from self-negation, social disparagement, and degradation. It is unfortunate that any educational institution should ever have deemed it necessary to accept classification for the sake of money considerations. Educational institutions, if classed as charitable, may get more legacies than they otherwise would; but the cause of education cannot fail to be hindered and its standards lowered when money is received as charity. The education of all children is absolutely necessary to the well-being of the state, and they should be granted and should receive all things, whether directly essential or merely incidental to their education, as matter of right and sound policy, and not as charity.

If a maximum of good results is dependent upon right classification and correct methods, what must be the effect on a child if he be classed as a recipient of charity, when he should be encouraged to put forth every effort to be self-respecting and self-reliant? If the word "charitable" were to be placed over every kindergarten, public school, and college in our land, the educational results would immediately be reduced to a minimum, and no claim or pretense of charity could prevent it.

Why then should children bereft of one sense be classed in this way? A gentleman once said to me, "Our charitable society is aiming to create the impression that we are using the term in the higher sense of 'good-will to men.'" The affections of love and good-will, however, are exercised between persons whether of the same or of widely different situations in life, independent of those conditions of poverty and pecuniary need which are the sole basis for acts of charity. Moreover, a policy or system which incapacitates individuals for growth into true manhood is neither

an expression of good-will nor of charity, and should have no recognition either in our statute or our common law.

In 1875, Dr. Samuel G. Howe, while principal of the Perkins Institution for the Blind and a member of the Massachusetts State Board of Charities, with great foresight secured the enactment of a statute by the Massachusetts Legislature, recognizing the Perkins Institution for the Blind as a distinctly educational institution, and placing it entirely under the jurisdiction of the educational authorities of the state. Surely no one will question the wisdom or the authority of Dr. Howe in a matter of this kind.

It can safely be said that the only assurance of the largest success of the work of special schools, and the only hope for children who have been deprived of some of their faculties, rest upon the avoidance of this needless and false classification.

As has been so clearly pointed out in the admirable paper of Prof. Fay, there can be but one right answer which is, the term "charitable" cannot be justly applied to the education of any children.

Topic IV, *What Teachers need to know about Sense Defects and Impediments*—messages chiefly from specialists in medicine—was next presented for consideration. The discussion was opened by Dr. Clarence J. Blake, professor of Otology, Harvard Medical School, Boston, Mass. Dr. Blake said in substance:

Medical inspection of public schools, first proposed at the medical congress in Philadelphia in 1876, and since become general, might do a still larger service by using more fully the knowledge of specialists always ready for public service.

Children who are thought to be backward or even idiotic are sometimes found to be merely deaf. The association of the American Otological Society and the American Association of teachers of speech to the deaf has been productive of much good. In the Horace Mann School this society found that out of 150 pupils eight per cent. could be helped enough to take their places with other hearing children, and that an added five per cent. could be helped so that the hearing would materially aid them in acquiring articulation; also that from ten to fifteen per cent. could have their latent hearing aroused by speaking tubes and other appliances.

A pronounced need in the direction of hearing is more likely to be helpfully met than one which requires investigation for its detection. It is to such cases as the latter that special attention should be given, for hearing is largely an involuntary process,

and one may lose one-half the normal hearing before the practical, basal, normal average is reached. This condition, however, draws upon the nervous reserve more than we are aware of. The special examination of large numbers of school children shows that the impairment of hearing is generally accompanied by fatigue symptoms due to the effort to make the other senses compensate for the failure of hearing to do its normal share.

A large proportion of the cases of partial deafness may be helped. The cause is usually inflammation of the middle ear due to catarrh or eruptive diseases of childhood, especially scarlet fever. Among the wealthier classes, diseases of the ear inducing partial deafness are not nearly so prevalent as among the poorer classes such as will make use of the education provided by the public schools.

Dr. Blake then urged a careful examination by the teachers of all public school children to ascertain if there were cases of deafness among them, and he presented a careful series of tests for such examinations. The cases of deafness found, he said, should be turned over to a medical expert who should keep a record of his examinations, and of the reference of cases to hospitals or infirmaries together with the result of treatment. (This system of tests cannot be given here, but every public school teacher should read Dr. Blake's paper in full and have it for reference.)

Such tests, if adopted, would be of inestimable value to certain children and would do much to simplify the problems with which the teacher has to deal in determining educational fitness.

Dr. Myles Standish, instructor in Ophthalmogy, Harvard Medical School, Boston, Mass., continued with a paper an abstract of which follows:

It has become a usual custom in our public schools to examine the eyes of new pupils by the test-card. When any child's vision is below normal, this method works well: the impaired vision is detected and the child's parent notified. When, however, the test seems to show normal vision, the eyes are supposed by the teacher to be perfect and further test has not been made. To show that there may be a grave mistake made here is the object of this paper.

The child with far sight can, by means of the muscles of accommodation, see perfectly at varying distances for a short time. The test card does not necessarily detect the far sighted eye and the child's vision may be pronounced normal. The accommodation of such an eye requires a large expenditure

of nervous energy equaling sometimes the amount expended by a normal eye in the process of seeing. The double expenditure of energy soon exhausts the reservoir of nervous force and certain phenomena present themselves. In school children this exhaustion is expressed *first*, in headache, coming on after continued near work; *second*, in lack of muscular control, which we call nervousness; *third*, in mental inability to grasp an idea presented through the eyes; and *finally*, in inattention. The ultimate outcome of this nervous strain may be a disinclination on the part of the children to apply themselves and possibly a resulting breakdown from which they recover only on being taken from school. Such symptoms point just as surely as tests with the test-cards do to imperfect vision and should be reported to the proper authority.

Children with normal vision form, if not watched, vicious ocular habits. Holding the book too near the eyes will, if continued, make a normal eye permanently short sighted; and the teacher who permits it is guilty of great negligence and starts the children out in life with a serious handicap.

But teachers are not the only sinners against children's eyes. Architects and superintendents of public buildings are often much to blame. The light should be arranged so that it can fall from the left. Light from windows in the back of the room does pupils' eyes little good and teachers' eyes much harm. The walls of the school-room should be a very pale green or blue, never red, brown, or chocolate, and in dimly lighted rooms may be yellow. The desks should be so arranged that the books can be inclined at angle to prevent the bending of the head and the cramping the muscles and vessels of the neck; but they should be so arranged that the children cannot lounge forward upon them.

Allen Greenwood, M. D., Ophthalmic Surgeon, Boston City Hospital, followed, saying in substance:

Embryology shows that the eye is largely formed from a prolongation outward of the same embryological structure that forms the brain. This means a frequent association of defective brain and eye development. The most common defects are those of shape, causing hypermetropia and astigmatism. These two defects, if considerable, make close application very difficult and fatiguing or impossible, largely preventing the mental improvement to be expected from proper instruction. Backward children with even considerable degrees of these defects can often with an effort pass the ordinary school tests, so I have suggested that every apparently dull and backward child in our public schools should have a thorough examination of the eyes

even though the ordinary school tests show nothing abnormal. Many apparently backward children are only so by reason of their eye defects, the correction of which will put the child out of the class of mentally deficient.

The improvement to be obtained by correcting refractive defects in the lowest grades of imbeciles is not marked or none at all, but in the higher grades of the inmates of our schools for feeble-minded considerable may be accomplished.

It is in the backward children of our public schools, however, that the greatest good may be accomplished. Here striking results are often obtained which emphasize the necessity of looking for eye defects as the cause of retarded mental improvement.

Dr. Eugene A. Crockett, assistant in Otology, Harvard Medical School, Boston, Mass., was the next speaker.

Dr. Crockett confined his attention to cleft palate and adenoid vegetations in the naso-pharynx, two diseases which interfere so considerably with the formation of the throat as to retard the development of the child's voice. Cleft palate is one of the oldest diseases recognized in medicine, yet it is often neglected if unaccompanied by hare lip. The operation for cleft palate is much more likely to be successful in a young child than in an adult. The condition is easily recognized by inspection. If it includes any considerable part of the soft palate there is marked interference with consonant sounds; the peculiar pitch of the voice rendering such sounds as may be well pronounced difficult to understand. Special voice instruction is of little use until the cleft is closed. An operation gives best results if it is successful; if unsuccessful, a plate should be worn.

Adenoid growth which always has been much more frequent was not recognized until 1868. In our latitude, from five to six per cent. of all school children have it. The facial expression of the child having it is almost diagnostic, and large growths interfere with speech in a characteristic way. The upper lip is short, upper jaw narrow, nose narrow, and face full under the eyes. The roof of the mouth is arched and the line of the teeth irregular. The child is a persistent mouth breather and is apt to snore or to breathe hard during sleep. The child is likely to have repeated colds in the head, a thick nasal voice, and difficulty in pronouncing certain consonants. In many cases there is a history of deafness, earache, and slow progress in school.

Such difficulty in speech as results from interference with the soft palate due to the pressure of the growth will be re-

moved by the removal of the growth at any age, but such obstruction of speech as comes from the narrowing of the nasal chamber will only be remedied by the removal before the frame-work of the nose, pharynx, and mouth has assumed permanent shape—that is, before ten or twelve years of age. The ideal time for the operation is between the ages of three and five.

Results from operations in cases of over eighteen or twenty years old have been quite unsatisfactory as far as effect on the voice is concerned. An added reason for this, beside the one referred to above, is that persistent mouth breathing, particularly at night, keeps up a constant irritation of the pharynx and vocal chords and destroys the fineness of the tone.

Curiously enough, the parent, in most instances, is less observant of his own child: therefore it is to the teacher we must look for an early recognition of the child's deficiencies and advice as to their repair.

The closing paper on this topic was given by Mrs. E. J. Ellery Thorpe, specialist on speech defects, Newton Centre, Massachusetts. The following thoughts are taken from this paper:

With persons having speech impediments to be corrected, Mrs. Thorpe had for some time worked along in the usual way—teaching the separate sounds, then gradually combining them into words and into sentences—until a case came to her which was made steadily worse by such training.

At this time, the centennial year, she met Madame Seiler, in Philadelphia, who was doing the same work in much the same way except that her great emphasis was put upon “making a tunnel of your body”; “letting there be no stop along the way.” By trying Madame Seiler's process, Mrs. Thorpe had great success and showed to her own satisfaction that where there is speech impediment there is a contraction somewhere, in the throat, lips, tongue, or jaw, and it is this that must be got rid of. She stopped teaching the consonant sounds, which teaching may simply increase the difficulty, and taught the free use of the vowel sounds only.

The primary cause of speech impediment is weakness in the breathing muscles and a consequent misplaced strength in the muscles that can impede the breath in its outward passage. Therefore the first thing to do is to train strength into the breathing muscles. Some children are deficient in the imitative power. These need to learn the formation of articulative sounds.

Secondary causes of speech impediment are fright, any disease affecting the throat, and imitation. Against this latter, children should be specially guarded. Cases range from mild to severe. Many outgrow the difficulty with the increase in strength of the breathing muscles. Sometimes tact on the part of the teachers carries the child over the difficulty—saying the difficult word, changing the subject, snapping the fingers, tapping on the floor to distract attention wrongly focussed. Singing lessons occasionally bring relief. Hearing others talk and being unable to express oneself in turn is a fearful strain. The time will come when it will be considered a crime to let a child grow up so. What can be done to obliterate this evil? First, apply the great law of prevention. Teach the child from the beginning to speak with breathing muscles. Let it learn the vowels first, as the vowels are the word. If all the energy of articulations is placed in the breathing muscles, instead of in the mouth, the jaw, and the tongue, the continuity of the breath or vowel sounds will not be interfered with.

When the child goes to school, he should find the teacher's voice a model; and the teacher herself should be acquainted with the foregoing facts and know how to correct speech impediments.

In 1893, there were 500 children in the schools of Boston who spoke with difficulty. Statistics show that the number in the United States who have trouble of this kind is nearly three times that of the deaf-mute, blind, and feeble-minded put together. To three of these classes every advantage is given that money and science can provide; to the fourth, having equal claim, no relief is offered.

A report from the Committee on Statistics of Defective Sight and Hearing of Public School Children was read. As it is expected that this report will be published in full in the forthcoming December number of the REVIEW, no abstract will here be made of it.

At the business session of the Department the president appointed the following named persons as a committee to continue the investigation into the number and conditions of pupils having defective faculties who attend the public schools, and to report at the next meeting of the department: F. W. Booth, Mt. Airy, Philadelphia, Chairman; Percival Hall, Gallaudet College, Washington, D. C.; O. H. Burritt, Institution for the Blind, Batavia, New York; Clarence J. Blake, M. D., Boston, Mass.; F. Parke Lewis, M. D., Buffalo, N. Y.

The following minute was presented by Dr. E. A. Fay, and adopted:

"The Department of Special Education of the National Educational Association desires by this minute to express its high appreciation of the character and services of its late member and former president, Dr. Joseph Claybaugh Gordon, who died April 12, 1903. Dr Gordon was active in the meeting of the Round Table of Teachers of the Deaf held in connection with the meeting of the Association in Milwaukee in 1897, which resulted in the establishment of this department. He was elected the first president of the department, took a prominent part in all its meetings, and was a strong believer in the possibilities of its usefulness.

In his death we mourn the loss of one whose work as teacher, superintendent, writer and speaker gave him a high place in our ranks, while his amiable disposition, attractive personality, and genuine friendship won our affection and esteem. We offer to his bereaved wife and children the assurance of our sincere and respectful sympathy.

Officers were elected for the ensuing year, as follows: President, J. H. Jones, Columbus, Ohio; Vice-President, F. W. Booth, Mt. Airy, Philadelphia, Pa.; Secretary, Elizabeth Van Adestine, Detroit, Michigan.

Upon motion the meeting was ordered adjourned.

Editorial Note: For the above report the editors have to thank Mr. Edward E. Allen, the president of the department, who has taken unusual pains to secure full and accurate abstracts of all papers read.

ANNUAL MEETING OF THE AMERICAN ASSOCIATION TO PROMOTE THE TEACHING OF SPEECH TO THE DEAF.

The Annual Meeting of the American Association to Promote the Teaching of Speech to the Deaf was held in Boston, Massachusetts, at the Horace Mann School, at ten o'clock A. M., Saturday, July 11, 1903.

Dr. A. L. E. Crouter, First Vice-President, called the meeting to order.

The following members of the Association were in attendance: Miss Julia R. Bateman, Halifax, N. S.; Susan E. Littlefield, South Boston, Mass.; Hon. John Hitz, Washington, D. C.; Sarah Fuller, Boston, Mass.; Mabel E. Adams, Quincy, Mass.; Edna L. Hobart, Boston, Mass.; Martha L. Hobart, Boston, Mass.; Virginia A. Osborn, Cincinnati, Ohio; John D. Wright, New York City.; Harriet B. Rogers, North Billerica, Mass.; Caroline A. Yale, Frances W. Gawith, Bessie N. Leonard, Cora L. Blair, and Abby Tilden Baker, Northampton, Mass.; J. R. Dobyns, Jackson, Miss.; Dr. Z. F. Westervelt, Mrs. Adelia Fay Westervelt, Rebecca E. Sparrow, Helen C. McNall, and Edmund Lyon, Rochester, N. Y.; Mary S. Breckenridge, Danville, Ky.; Anna Morse, Jacksonville, Ill.; Elbert A. Gruver, New York City; Helen Keller and Anne Mansfield Sullivan, Wrentham, Mass.; Dr. E. A. Fay, Washington, D. C.; Robert C. Spencer, Milwaukee, Wis.; Daisy M. Cannon and Rhea Friedman, Chicago, Ill.; Alvin E. Pope, St. Louis, Mo.; Dr. A. L. E. Crouter, Philadelphia, Pa.; Richard O. Johnson, Indianapolis, Ind.; Dr. Edward M. Gallaudet, Washington, D. C.; S. G. Davidson, Philadelphia, Pa.; Mrs. C. R. Crane, Chicago, Ill.; Jennie C. Smith, Eau Claire, Wis.; Mary McCowan, Cornelia D. Bingham, and Endora Montgomery, Chicago, Ill.; Mary Hyde Carroll, New York City; Edward E. Allen, Philadelphia, Pa.; Candace A. Yendes, Edgewood Park, Pa.; W. O. Connor, Cave Spring, Ga.; John W. Jones and Mary

Greener, Columbus, O.; Mary True, Bethel, Me.; Elizabeth Van Adestine, Detroit, Mich.; Wm. B. Hare, St. Augustine, Fla.; Anna R. Camp, Chicago, Ill.; John E. Ray, Raleigh, N. C.; Frances Wettstein, Milwaukee, Wis.; Katharine E. Barry, Cleveland, O.; M. Anagnos, Boston, Mass.

The call for the meeting, issued by the President, and published in the ASSOCIATION REVIEW for April, was read.

The minutes of the last annual meeting of the Association by consent stood approved.

The chairman announced that the first business would be to consider the amendments to the Constitution presented in writing by Dr. A. L. E. Crouter and Mr. F. W. Booth at the meeting of the Association held on Wednesday, June 11th, 1902, at the Institution for the Improved Instruction of the Deaf, New York City. (Each of these amendments had for its main purpose to increase the membership of the Board of Directors from nine, the present number, to twenty-one. Dr. Crouter's amendment further provided that no retiring Director at any election should be eligible to succeed himself, while Mr. Booth's amendment provided that no more than two retiring Directors should be thus eligible.)

The amendment proposed by Dr. Crouter was read and a motion made by Dr. E. M. Gallaudet to lay the resolution upon the table was defeated.

A motion, by Mr. Edmund Lyon to adopt the amendment as read, was lost and the amendment rejected by a majority vote.

The amendment presented by Mr. F. W. Booth was then read, and upon motion by Mr. Edmund Lyon was also rejected by a majority vote.

Under the provisions of Article VIII of the Constitution, Mr. Lyon presented in writing the following amendment:

To amend Section I, Article V, of the Constitution as follows:

In the second line, strike out the word "nine" and in its place insert "fifteen"; strike out the word "three" same line and insert "five," and further add to the last sentence: "in case of failure of the President to appoint, by the Chairman of the meeting."

As thus amended Section 1, Article V, will read as follows:

The Board of Directors shall be composed of fifteen members of the Association five of whom shall be elected by the Association at each Annual Meeting, to serve for three years. Directors shall be elected by ballot, under the supervision of inspectors, to be appointed by the President: in case of failure of the President to appoint, by the Chairman of the meeting.

Chairman Crouter stated that these amendments presented for consideration in writing under the provisions of Article VIII of the Constitution, would be laid upon the table, and that, in order to adopt them, they would have to receive the affirmative vote of two-thirds of the members present at the next meeting of the Association, whether it be general or special.

It was on motion,

Resolved, That in the event of the adoption of the amendment to the Constitution duly proposed by Mr. Edmund Lyon, at the next Annual Meeting of the Association nine directors shall be elected to serve as follows: five for three years, two for two years, and two for one year.

In conformity with the resolution adopted at the last meeting directing the General Secretary to print the by-laws, revised to date, copies of the by-laws printed under this resolution were distributed to the members present, and the chairman stated that copies would be furnished to all members of the Association upon request made to the General Secretary and Treasurer.

The chair called upon the secretary to present to the Association the names of such persons as had been nominated for Directors, in conformity with the provisions of Section 3, of Article V, of the Constitution.

The Secretary stated that under date of June 1, 1903, there were placed in the hands of the President and Secretary the following nominations in writing: Dr. Alexander Graham Bell, of Washington, Mrs. Gardiner G. Hubbard, of Washington, and Dr. A. L. E. Crouter, of Mt. Airy, Philadelphia, and that as these were the only persons nominated according to the requirements of the Constitution to fill the places made vacant on the Board of Directors by expiration of the terms of office of Dr.

.

Alexander Graham Bell, Mrs. Gardiner G. Hubbard, and Dr. A. L. E. Crouter, no others could be voted for.

Upon resolution duly presented and adopted, the Secretary was directed to cast a single ballot for the three persons whose names had been presented. Mr. Lyon and Mr. Gruver having been, by President Bell, appointed tellers, the ballot cast under their supervision was announced by the chairman, in the election of Dr. Alexander Graham Bell, Mrs. Gardiner G. Hubbard, and Dr. A. L. E. Crouter, as members of the Board of Directors, their term of office to expire at the close of the Summer Meeting in 1906.

The chairman announced the appointment of the committee appointed by the Board to cooperate in the interests of teaching speech to the deaf with a committee appointed by the American Instructors of the Deaf at the St. Louis Exposition, the committee named being Mr. Richard O. Johnson, Mr. Edmund Lyon, and Mr. E. A. Gruver.

The Association then listened to a communication from Dr. Edward M. Gallaudet, chairman of the committee on the St. Louis Exposition, appointed by the Convention of American Instructors of the Deaf, explaining the purpose of his committee to encourage a full presentation of the work of oral schools in charts, photographs of classes, school apparatus and furnishings, living exhibits, together with courses of study, text-books, etc., and whatever could be presented that would make clear the plan and scope of the work of oral schools. And in doing this he welcomed the cooperation of the Association committee appointed by the Board.

Mr. Alvin E. Pope, chairman for the Model Schools for the Deaf and the Blind at the St. Louis Exposition, followed with an explanation of the arrangements that have been made and that are contemplated for this feature of the Exposition.

Vice-President Crouter expressed the thanks of the Association to Dr. Gallaudet and to Mr. Pope for their very full and courteous presentation of the matter.

The Treasurer's report of the funds of the Association was presented as follows:

Balance, as per Report of June 11, 1902..... \$1032 08

RECEIPTS.

Life Membership Fee, Mrs. A. M. Campbell.....	50 00
Annual Subscription, Alexander Graham Bell.....	1500 00
Annual Subscription, L. S. Fechheimer.....	25 00
Annual Membership Dues.....	884 00
Subscriptions to Association Review.....	12 50
Sales of Publications.....	14 79
Advertising in Association Review.....	36 50
American Security & Trust Co, Income from Funds.....	1201 89
Interest on Bank Deposits.....	18 35
	<hr/>
	\$4775 11

DISBURSEMENTS.

Salary and wages account.....	\$3020 07
Printing Association Review, 5 numbers.....	671 05
Printing—job work, circulars of information. etc.....	121 89
Translating, reviewing, and contributions.....	165 35
Wrapping, postage, and express on Reviews.....	29 93
Engraving.....	11 28
Fee for Treasurer's Bond.....	10 00
American Security & Trust Co., two Life Membership Fees, transferred to Endowment Fund.....	100 00
Postage, express, telegraphing, travelling, etc.....	202 43
Balance.....	443 11
	<hr/>
June 30, 1903.	\$4775 11

F. W. BOOTH, *Treasurer.*

Miss Yale presented the report of the committee on Summer School. The report was upon resolution accepted and ordered filed and the committee continued.

The chair announced the election by the Board of Directors of Mr. Elbert A. Gruver to the place upon the Board made vacant by the death of Dr. Joseph C. Gordon.

Upon motion, the following greeting to be sent by wire to Dr. A. Graham Bell, at Beinn Bhreagh, Baddeck, Nova Scotia, was adopted with enthusiasm:

“Best wishes to Dr. Bell and hopes for his speedy recovery. Association Meeting is interesting and harmonious. Only regret is the enforced absence of the President.”

On motion the Secretary was instructed to express to the General Secretary, Mr. F. W. Booth, our regret for his absence, and our wishes for his speedy recovery and prolonged usefulness.

Miss Fuller presented the report of the Necrology Committee, giving the following names of members of the Association who had died during the past year, with the names of the persons who prepared notes for presentation at this time:

Dr. J. C. Gordon (Mr. Johnson); Miss Antonia B. Hope-man (Mr. Westervelt); Mrs. Gilbert O. Fay (Miss Yale).

By motion duly made and carried, the report of the Necrology Committee was accepted, with the request that the notes be printed in the ASSOCIATION REVIEW.

Upon motion duly made and carried, it was

Resolved, That the thanks of the Association be extended to Miss Fuller for her untiring labor during the past week in behalf of Section Sixteen of the N. E. A., and for the labor in arranging for the reception given last evening, and for the use of the Horace Mann School as the place of this Summer Meeting of the Association.

Meeting adjourned.

Z. F. WESTERVELT, *Secretary*.

The following additional names of members in attendance upon the annual meeting were received too late for insertion in their proper place: E. W. E. Thompson, Brookline, Mass.; Carrie Billings, Flint, Mich.; Alice H. Damon, Mystic, Conn.; Caroline S. Daniels, Northampton, Mass.; Mrs. Geo. Hutchins, Dorchester, Mass.; Katharine King, Columbus, O.; Kate F. Hobart, Mary H. Thompson, Martha E. Melchert, Ida H. Adams, Mrs. Alice M. Porter, Boston, Mass.; Eliza L. Clark, West Medford, Mass.

HISTORICAL NOTES CONCERNING THE TEACHING OF SPEECH TO THE DEAF.¹

APPENDIX 51.

DISCUSSION IN THE CHRISTIAN OBSERVER IN 1818 CONCERN-
ING THE ADVISABILITY OF TEACHING SPEECH TO THE DEAF.

[From the *Christian Observer*, August, 1818, p. 514.—On file
at the Boston Public Library.]

EXPEDIENCY OF TEACHING THE DEAF AND DUMB TO ARTICULATE.

To the Editor of the *Christian Observer*:

My own observation having led me to doubt whether it be expedient, on the whole, to teach the deaf and dumb to articulate sounds, as is the customary practice in the various excellent seminaries which have been instituted in Great Britain for their instruction, I was induced to apply to a friend who, I knew, had taken a particular interest in this subject, for information upon it. He has seen much of the methods which are practised at the deaf and dumb institutions both in England and in France, and can himself converse intelligibly, and even rapidly, with the deaf and dumb in both countries. It appeared to me, therefore, probable that it would be in his power to throw some light on a question of no small importance to these objects of general commiseration. I transmit to you an extract from his reply to my inquiries; and if his remarks shall appear to you to deserve the attention of the public, I am persuaded you will not refuse them a place in your useful miscellany. B.

“All language is employed either to convey from one mind to another what is passing within itself, or to

¹By Alexander Graham Bell. Six chapters of this work have been published in Vol. II, with Appendices A to P, see Index to Vol. II. For Appendices Q to 39, see Index to Vol. III. For Appendices 40 to 50, see Index to Vol. IV.—ED.

excite certain trains of thought or emotion in the one which is addressed. This is true even with regard to words denoting objects of sense, and still more emphatically with regard to terms of generalization or abstraction, and those which express the emotions of the heart, the purposes of the will, or the operations of the mind. My grand effort, then, would be, as soon as possible, to teach my pupils that they have within them something which feels and thinks; that this something is called the soul; that it is unlike any thing which they can see, taste, smell, or touch; that it will never die; and that, when the body is laid in the grave, it will be happy or miserable. It is wonderful to see the readiness with which they understand these truths; and Mr. ————'s mode of unfolding them by the analytic process is most admirable. I would next lead them, by easy conversation, to mark the *various states* of this soul; and this, by the way, they are as capable of doing as those who can employ written or spoken language. I would refer them to their dreams, to their recollections of home and kindred, to their forgetfulness, to their hopes and wishes, their fears and passions. Thus they are taught to exercise *reflex* acts of mind; and I uniformly observe that those who can mark and describe, with the greatest precision, the operations of their own minds, make the most rapid progress in the acquisition of written language, and of religious truth. The reason of this is obvious. *Every word* we employ denotes some *relation* existing between the human *mind* considered as an observer, an agent, or a patient,—and some *external object* or *internal* emotion, purpose, or thought. Take the whole range of the visible creation, of the thousand influences which it has upon us; of the various modes by which we are affected by our fellow men; of all moral, religious, and intelligent agency; and you will find, that the soul stands as it were in the centre of this mighty amphitheatre of existences, which it either regards with the eye of cool observation, or yields to, as the procuring causes of the various changes it experiences in all its various operations. It must then know *itself*, in order to know these innumerable relations which it sustains, and to be able to comprehend the terms which denote them. And I believe it will be found, that in every endeavour which we make to ascertain the precise meaning of a word, we involuntarily

look back through the history of our own minds, and call to remembrance the various occasions upon which and modes *by* which we were affected by the object which such a word is intended to denote.—I say, ‘A tree is green;’ you immediately think of some particular tree which through the medium of the eye once affected *your mind*. I say, ‘Honesty is the best policy;’ you involuntarily recall instances of your own conduct, or of conduct in others which has been addressed to *your own* mind, in order to fix the import of these words. I say, ‘although’ is a word denoting the existence of something in spite of the existence of some other thing, which might seem to prevent the existence of the former. You forthwith think of some occasion in which *your own mind* was affected, in that manner which the term ‘although’ is intended to denote. I speak to you of myself, or of God the great Father of our spirits; and every conception which you can possibly form of my mind, or of the Eternal Mind, must be derived from what you know of your own.

“Now, if I could only succeed in getting pupils to mark accurately the states of their minds, when certain objects, whether physical, moral, or intellectual, are presented to their view; I should have only to tell them, that such states, under such circumstances, are described by such and such words, and my work would be done. Bring the object and the mind into contact, which can easily be done by gestures; bid the pupil notice the effect of this contact upon his own mind; the *name* then is only setting up a sort of land-mark, to which you can afterwards easily refer in the progress of the future discovery of truth and acquisition of words.

“There is really no more intrinsic connexion between written and spoken words and ideas, than between *signs* and ideas: indeed, the language of the deaf and dumb is abundantly more significant than any other, in as much as it denotes that change which takes place in our bodies and countenances by the movements of the soul; and so far as intellectual processes bear any analogy to the motions of matter, it shadows forth this analogy in very striking and significant emblems. ‘What moves my foot?’ I asked a class of deaf and dumb one day, after having explained to them *purely* by signs, that when I thought and wished to have my foot move, it did so. ‘Your mind moves your foot’ was the uni-

versal reply. I then told them purely by signs, that I could not control the motion of my heart. 'What moves my heart?' Some answered, 'God moves your heart;' and others, 'God's mind moves your heart.'

"You ask of me my reasons for thinking that the deaf and dumb ought not to be taught articulation. Without going into any elaborate discussion of this subject, I beg leave to refer you to some remarks on the inexpediency of this branch of the education of the deaf and dumb, from the pen of one of the first philosophers of the age, who resided in Edinburgh many years, and had a continual opportunity of witnessing the efforts of Mr. Braidwood, who was probably the most successful teacher of articulation to the deaf and dumb that ever lived; I mean Dugald Stewart, who, in his account of James Mitchell, the deaf, dumb, and blind lad, expresses himself very strongly on this subject; and so strongly, that if the opinion of so great a man, and so profound an observer of the human mind, is worth any thing, it must be decisive so far as human authority can have weight.

"I believe, too, the experience of all the schools for the deaf and dumb, in which articulation is taught, will prove that the instances of success for any useful, practical purpose, are so rare as to render the general attempt inexpedient. It was matter of wonder to me, while I often witnessed the intercourse of the deaf and dumb with each other, and with their instructors too, to observe how seldom they resorted to the language of the lips. Am I not correct in this? To make this language of articulation truly useful to them, it is not enough that they learn to utter many single words or some common phrases, or even to understand tolerably well their instructors, with the peculiar motions of whose organs of speech they become familiar. They ought to make such proficiency as to be able to make themselves understood by the mass of mankind, and also themselves to understand the continued discourse of a stranger. I very much doubt whether one in one hundred, after *six years'* instruction, can do this. Let the experiment be made by one hour's conversation on indifferent subjects. Now this business of articulation is attended with numerous inconveniencies: it is not the natural language of the deaf and dumb, and is therefore peculiarly irksome to them: it is purely mechanical,

conveys not one *new* idea to the mind; (whereas the language of signs is abundantly significant by its analogical character :) it confuses the minds of the pupils, by directing their attention to too great a variety of objects, being something like the effort we should have to make to acquire *two* languages at the same time: it involves immense labor and fatigue both on the part of the instructors and the pupils, inasmuch as the syllabic division of words, their accent, and the differences between orthoepy and orthography, must be clearly communicated—a task of tremendous difficulty, and in most cases a hopeless one: it prevents the instructor from devoting his labors to more pupils, and to a more important part of education—the actual communication of knowledge, and the unfolding of the powers of the human mind; and it discourages the pupils by its extreme irksomeness; whereas, communication by their own language of signs, the basis of all their instruction, and of which our written and spoken language is only a *translation*, is easy and delightful to them. I might also add, that it diverts the mind of the instructor from that to which all his ingenuity and skill should be directed, improving the language of signs, on which every step in the instruction of the deaf and dumb must of *necessity* rest.

“Besides, how much more interesting to a person of feeling and taste (though this, to be sure, is a thing of minor consideration) is the silent language of the countenance, gestures, and the fingers, than the harsh and discordant sounds which they must utter who cannot regulate and modify the tones of their voice!

“But I will rest the whole matter on two experiments. Let a pupil of the French school, who has been taught one year, be compared with one of equal intelligence in the English school who has been taught two years, and I will venture to say, the former will have made as much progress in *written* language and in the true import of words as the latter.

“The other experiment to which I allude is, that two pupils shall be required to communicate their thoughts intelligibly to a stranger who has learned the finger alphabet (which may be learned in a few hours); the one by articulation, and the other by this alphabet; and also to receive answers—in the one case from the lips, and in the other from the hand; and let it be noticed

which of the two will accomplish this object with the most dispatch. I will pledge myself to talk more rapidly with a well-instructed deaf and dumb person on any subject proposed, by means of the finger alphabet, than any deaf and dumb person taught articulation can do with yourself. There are in this city, I dare say, one hundred acquaintances of my deaf and dumb friend Mr. ———, whom you know, who can converse with him on the fingers with five times the rapidity with which the most adroit penman can write. Can the deaf and dumb who articulate carry on conversation with this rapidity? By the way, it is matter of astonishment to me, that the schools in Great Britain should persist in using the alphabet on both hands, when the French alphabet on one is just as distinct, and more graceful, flowing, and rapid; while it leaves one hand at liberty to make signs, or for various other useful purposes. It is often of immense advantage to be explaining by a sign with one hand, the very word which you are spelling with the other. But my thoughts have carried me too far. Pardon my prolixity, and also the hurried manner in which I write; but I am stealing the time for writing from the hours of slumber. Adieu."

A REPLY TO THE ABOVE.

[From the *Christian Observer*, December, 1818, p. 787.—On file at the Boston Public Library.]

To the Editor of the *Christian Observer*:

Will you permit me to make an observation or two on an article that appeared in your Number for August, entitled, "The Expediency of teaching the Deaf and Dumb to articulate." The nameless correspondent of your correspondent B. says, "My grand effort would be, as soon as possible, to teach my pupils that they have something within them that feels and thinks," etc. This, to say the least of it, appears to me to be an effort without an object. They are as conscious of the capacity as their teacher. But by what *name* they are to designate the faculty—whether *animus*, *âme*, or *soul*—will depend upon him.

It has often excited my astonishment to meet with persons, otherwise very intelligent, either altogether sceptical, or quite lost in the labyrinth of metaphysical

fancies, when the subject of teaching the naturally deaf and dumb has been agitated by them. I never could account for it in any other way than by supposing that they had not attentively considered wherein these mutes resemble, and wherein they differ from, the rest of their species. Are they not dumb *only* because they are deaf. The *resemblance*, I think, is complete in natural capacity to apprehend. The *difference* consists in an accidental defect, precluding the acquisition of a *mother-tongue* in the ordinary way. Give them this and you supply them with a fulcrum, to overthrow the mass of ignorance that weighs them down. The wall of separation removed, they are no longer *alone* in the social circle—they are enlivened by conversation—instructed by the page of history—enlightened and comforted by the records of eternal truth—and are in every view, elevated to the rank of their fellow-beings. All this, I maintain, is accomplished by the plain, rational, and practicable method of teaching them the language of the country where they happen to be situated, or, in other words, giving them a *mother-tongue*.

To effect this, we must, if we expect success, follow the course by which *words* have acquired value and significancy with ourselves: we therefore name *things* to the deaf and dumb, and teach them to name them also. By *things* is not here meant external objects only, or such insulated names as grammarians call substantives, but all that is the subject of our percipient faculties, in the form of *being, attribute, action, and relation*. Be it remembered, that we came to the possession of *our* mother-tongue, the foundation of the whole superstructure of our most refined speculations, solely by the reiteration of those *names* (words or phrases) being made intelligible to us, through the medium of the organ of hearing, as constantly applied to the perceptions which they serve to note. Happily for the deaf and dumb, words or names may be seen and felt, as well as heard. The arts of writing and printing speak to the eye: certain visible characters have a conventional value; and combinations of these characters serve men to *name* or *call by*, as well as articulate sounds, of which they are to *us* the representatives. It is necessary, therefore, I conceive, on the very threshold of our instruction of the deaf and dumb, if we mean to teach them written language, to make them well acquainted with the *charac-*

ters or *letters*, their intention and value, before we trouble them with the application of their combinations. They may be shown to them in succession. They may be formed by the hand with pen or pencil: still they are something external, and very unmeaning to the mute learners. Not so when you teach them a series of movements (or distinct actions) of the organs of speech, which they can see in others, and feel in themselves, associable in their minds and memories with the characters they have been required to look at and to trace. From that time *these* become the indices or exponents of things, and acquire a value with the learner as the representatives or names of acts they have learnt to perform by organs hitherto dormant, but which they feel to be perfectly well adapted to the use they have been taught to make of them. *Letters* (the alphabet of the language they are about to learn) are no longer strange unmeaning strokes; they have become intimately connected with the very frame of the learners—a part of themselves, as it were. For, efface the tablet of the deaf incipient speaker, or remove him from the means of writing, he can still go through his *acts*, associated with the visible appearances in question, and presently becomes sensible of a new power, that of being *readily* able to excite, in others, associations similar to his own—he sounds a letter, we write it—we sound one (letting him *see*, of course the motion of our organs), he writes it. Is not this conversation? Can it be doubted whether the parties understand each other?

Is, then, this simple convention unimportant? Is it not the very basis of all artificial language; and is this additional hold of a thing to be remembered of little worth? Those only, I conceive, will answer in the affirmative who have not sufficiently attended to the operations of their own minds, and who have overlooked the force of association and analogy in every mental process. Details would carry me far beyond the limits of a communication like this, else it were easy to demonstrate that the principle applies *a fortiori* to *words*, or combinations of letters, as the nomenclature of thought.

In this view, teaching articulation to the deaf and dumb rests its most important advantages on its utility, as the means to an end; namely, the more speedy and perfect acquisition of language; not the fanciful passig-

raphy of methodized signs (*that* could be useful only were all the world deaf and dumb, or to whole communities of such mutes), but the language of their families, their neighbours and countrymen; that which, in fact, would have been their mother-tongue, had nature not deprived them of the usual inlet. It is needless, therefore, I think, to waste time in talking about harmonious or inharmonious pronunciation: no rational person ought to expect the speech of those who never heard, to be modulated into rhythmical harmony; music and oratory may, and must, be readily given up. But there are other valuable ends to be answered by articulation: the most important of all is that already insisted upon; the next to it is the communication of thought. For I am warranted in saying, that ninety-nine out of every hundred deaf and dumb persons (memory and intellect being acute) may be brought, provided the education be begun sufficiently early, to articulate in a manner *not* intolerably harsh, and abundantly intelligible to all who are in habits of intercourse with them. And who, I would ask, are so much interested in understanding them? But suppose the worst; let them fall in with strangers, whose ears, unaccustomed, to their less perfect articulation, feel it unpleasant, or even unintelligible. What hinders their use of writing, the manual alphabet, or "look and gesture," if required? Is there any thing to preclude this simply from the circumstance of their being able to converse in another way with those who like to hear them, because they can readily understand them? It must not for a moment be imagined that teaching to speak narrows the capacity for other modes of communication: signs, when duly estimated, are used as the connecting link between the deaf and their teacher. Articulation hinders nothing; it furthers much; it is a superadded faculty, and may be used or not, at pleasure. It is felt and valued as such by all who, with it, have acquired a knowledge of the language used by those around them: it is thus felt, also, by the parent, the brother, the friend, and companion, of these unfortunate individuals.

It is far from my wish to make comparisons that might lead to invidious discussions. I reluctantly, therefore, allude to the terms "French school" and "English school," brought forward in the paper which gave rise to these remarks. But I must affirm, that if the com-

parison should be found to be as disadvantageous to the "English school" as B's correspondent states; it will arise from other causes than the one to be inferred from his words. Is this gentleman aware that the venerable Principal of the "French school," while in London, expressed his conviction of the advantages of teaching articulation to the naturally deaf and dumb, declaring his intention of introducing it into the institution at Paris on his return? And that, if the journals of a few months back may be credited, it has actually been there introduced with some success?

Not having read or heard, that I remember, the observations of Professor Dugald Stewart on the subject, I cannot reply to them: but no *name* can weigh against convictions derived from actual observation.

"The methodizing and perfectioning of signs" falls properly to those who think the deaf and dumb incapable of learning a language common to their countrymen, or who imagine the generalization of ideas by manual signs the most perfect of all languages. If it be so, why not substitute it in the place of all others?

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Second

REVIEWS.

Data from Institutions for the Deaf.

Mr. Frank B. Yates, superintendent of the Arkansas School for the Deaf, published last spring an interesting compilation, in tabular form, of the answers received to inquiries regarding matters on which the heads of institutions frequently need to be informed. In thus placing the data at the service of other superintendents, he has done a favor which we are sure is highly appreciated. There are in all 48 questions, which were addressed to 49 schools, 6 of which make no reply to any of the queries. Of the remaining 43, a large proportion do not answer the questions relating to salaries, apparently not caring to have such details of their affairs made public.

The table gives the number of pupils in each school, the number of literary teachers, the number of pupils in the speech department, number of pupils in the manual department, and number of teachers in manual department. The replies to the query as to the proper size of a speech class place the number of pupils at from 6 to 12, most favoring 10; while the estimate of the proper number of pupils for a manual class ranges from 8 to 18. The lowest salary paid to a male teacher of speech, with board, is \$600, and highest, \$1,300; without board, lowest \$700, and highest \$1,600. For female teachers of speech, the salaries are, with board, lowest \$450; highest \$1,200; without board, lowest \$400, highest \$1,400. Manual teachers receive, with board, males, from \$447 to \$1,300; females, from \$400 to \$1,200; without board, males, from \$800 to \$1,600; females, from \$500 to \$1,250. Industrial teachers receive, with board, from \$400 to \$1,000; without board, from \$600 to \$1,100. Art teachers are paid, with board, from \$300 to \$555; without board, from \$525 to \$1,100. The per capita cost of maintenance and in-

struction ranges from \$135 to \$300. 20 schools think their per capita allowance should be increased, while 9, among which we note the one having the lowest, do not. The salaries paid superintendents or principals vary from \$850 to \$3,000. The lowest salary paid inexperienced teachers is \$90, and the highest, \$500.

Regarding the proper age for admission of pupils, one gives as low as 4 and one as high as 9, but 6 and 7 years are favored by the majority. The number of years the pupil should remain in school is given at from 9 to 13. Two principals say they should remain indefinitely until they complete the course.

To the question whether speech teaching is advancing or on the wane in the United States, 26 claim it is advancing; 1 that it is waning; and 6 that it is stationary. Asked whether speech pupils should be put in separate buildings located on the same grounds with and close to sign pupils, yet be forbidden to associate with them and learn signs, 26 answer "No"; 2, "Yes." To the query whether speech pupils should be placed in separate classes, and taught wholly by speech in a school where sign and speech pupils mingle freely, 33 say "Yes"; 2, "No." 12 favor separate classes in both speech and drill classes, and 22 do not. 12 favor drill classes in speech pupils taken from manual classes, and 23 do not. 33 superintendents or principals believe in the combined system of instruction; 5 in the oral; and 1 in the manual. 32 believe in signs; 4 do not; 1 favors them in lectures but not otherwise. 8 believe signs should be encouraged in the school-room; 18, that they should not; and three others give a qualified affirmative. 21 believe that signs should be used in the school-room; 8 that they should not; and 10, to some extent. 3 say that writing and the manual alphabet should take the place of signs entirely; 27, they should not; and 6 say "largely."

6 think that teachers should board in a school for the deaf; 23, that they should not; and 2 answer "both." 2 claim teachers should be required to eat with pupils; 29, that they should not. All believe superintendents should be allowed to appoint their support. To the question, "Should inexperienced teachers ever be appointed in schools for the deaf?" 9 answer "Yes"; 23, "No"; and 6 say "it depends." 33 favor increasing de-

serving new teachers' salary yearly until a fair salary is reached; 1 does not; 1 says teachers should be paid for services rendered or as experience warrants. In answer to, "Should pupils be required to do dining-room or laundry work, except to learn how to do it?" 13 answer "Yes"; 24, "No." With one exception all are agreed that this work should not be permitted to interfere with school work. The superintendents and principals are unanimous in endorsing the cottage system for little ones.

The tabulated answers are accompanied by numerous foot notes explanatory of or qualifying them. In a concluding note Superintendent Yates says: "In answer to our question, 'Please, in a few words, give your definition of a combined system school for the deaf,' we received a great number of answers. We believe the following answer will be about the concensus of opinion: It is a school which uses any, or all methods, or systems and instructs each child by that method which best suits its individual capabilities and needs, the chief aim being mental development."

American Annals of the Deaf, Washington, D. C., September, 1903.

The leading article in this issue is "Libraries in State Schools for the Deaf," a thesis for the degree of Bachelor of Library Science in the State Library School of the University of Illinois, presented June, 1903, by Miss Helen T. Kennedy, formerly librarian in the Illinois School at Jacksonville. It contains much interesting information regarding the size, character, circulation, and methods of using the libraries in the various schools for the deaf, and offers suggestions on their organization and cataloguing to those who may have them in charge. There is also a discussion of the value of reading to the deaf, and of the methods for cultivating a taste for profitable literature. The author believes that the librarian should be neither a teacher, clerk, or other officer of the school to whom the duties of the position would be subsidiary, but one who would devote her whole time to the work. A list of most popular books in the various schools is a valuable feature of the article. "Schools for the Deaf and the Blind not Charitable Institutions"

a paper read by Dr. E. A. Fay before the meeting of the Department of Special Education, N. E. A., last July, an abstract of which is given in the report of that meeting in this issue of the REVIEW. It is a full, clear, and logical statement of the grounds on which schools for the deaf claim to be educational, not charitable, institutions.

"The Meeting of the Department of Special Education, of the National Educational Association, Boston, 1903," and "The Thirteenth Meeting of the American Association to Promote the Teaching of Speech to the Deaf," occupy much space in the number. "The Importance of Developing the Artistic Faculties of our Pupils," by Mary Roland Beattie, teacher of art in the Flint, Michigan, School, contains little that is new, but states in an interesting way facts that should be kept before the profession. There is the usual collection of school notes and miscellany.

Organ der Taubstummen-Anstalten in Deutschland [Organ of the Institutions for the Deaf of Germany]. Friedberg. June, July, and August, 1903.

"The meeting of the Association of German Teachers of the Deaf." This meeting which is expected to be very largely attended by teachers, not only from Germany but also from foreign countries, is appointed to be held at Frankfurt-on-the-Main, September 27th to 30th, 1903.

"Defects in the organization of the Norwegian system of deaf-mute education," by J. A. Fjörtoft, Christiania. Only one year of probation is allowed for dividing the pupils according to their talents and their ability to derive real profit from instruction in the different branches. This time should unquestionably be extended, for one year is too short for the teacher to form a correct judgment of his different pupils. Two years will probably meet all reasonable demands. Another and still greater defect of the Norwegian organization is this, that of the five institutions for the deaf only two have instruction in articulation. It is well known that instruction in articulation is most wearing on the nerves and general health of the teachers. The remedy is to found independent schools, where pupils

are received every two years. Another defect is this, that in the schools where deaf children are received first, those who have learned to use speech at least to some extent, are mixed with the newly received children. No one can prevent that signs will form the daily means of communication among the children. The remedy is an organization under which all children capable of being educated shall remain in one and the same school till their confirmation. The main point in every organization is the proper division of the pupils according to their capacity. "The motions of expression and their relation to speech; II, the sign language as a further development of these motions; III, the formation of sounds as a further development of these motions," by H. Hoffman, Ratibor, Germany. "Instruction in history in institutions for the deaf," by K. Kraiss. "Biography of Wilhelm Hirzel, Director of the institution for the deaf at Gmünd," by Griesinger; in commemoration of Hirzel's eightieth birthday, July 17, 1903. The life of a man who from his earliest youth devoted all energy to the education of the deaf; and this with eminent success. Whenever the history of German deaf-mute education is written, Hirzel's name will occupy a prominent place.

"Warning against the introduction of instruction in weaving in schools for the deaf," by K. Finckh, Schleswig. In the beginning of April, 1903, an exposition of articles of the weaving schools in Sweden and Finland was held at the Ministry of Public Instruction in Berlin. These articles had been collected by Counsellor Hansen of Kiel during a journey through the northern countries of Europe. Everybody was surprised to see the many and often truly artistic creations of the hand loom; and the press of Berlin in giving an account of this exhibition asked the question how it was that the German schools did not produce similar work. Mr. Finckh thinks that certainly manual labor should be taught more than it is at present, but that the introduction of instruction in weaving in the German schools would be a mistake. Grown up deaf girls of the wealthier classes may engage in weaving as a pleasant and artistic recreation; but in Germany—where the conditions are far different from those in Sweden and Finland and where machinery has long since

crowded out the hand loom—deaf children, the majority of whom belong to the poorer classes, should be taught some trade which, as soon as they leave the school, enables them to earn their bread. “Art in the School,” by Hugo Hoffmann, Ratibor, Germany. Twenty or thirty years ago the educational apparatus in the German schools was of the poorest description. This, of course, applied also to the schools for the deaf. But with the great industrial and commercial development of Germany, following upon the establishment, in 1871, of the new German Empire, a new impetus was also given to education; and one of the results is that, among the rest, it is the avowed object of the school to awaken in the pupils an appreciation of all that is beautiful in art and nature. A large firm in Leipzig deals exclusively in pictures to be used in the school-rooms. These pictures are by no means of the cheap, trashy kind, but are prepared by German artists of the first rank, and finished in a truly artistic manner. The price of each picture, as large as a large wall map, and ready to hang, is only 3 marks (71 cents). The subjects embrace: the history of civilization; natural history, geography, history; industry, commerce, etc.

Among the miscellaneous communications we note that Mr. Eugene Lutermeister of Aaran, Switzerland, a very talented deaf person, well-known among the German speaking nations by his beautiful poems, has by the Synod of the Berne Church been appointed itinerant preacher to the deaf in the Canton of Berne. This meets a long-felt want, and every Sunday Mr. Lutermeister preaches to the deaf in the country districts.

Blatter fur Taubstummenbildung [Journal of Deaf-mute Education], Berlin. June, and August, 1903.

These numbers contain the following quoted subjects: “History of the development of popular ‘readers’ for schools,” by P. Odelga. “The School for the Deaf at Genoa,” translated from the Italian of Professor Ferreri, by K. Baldrian. “The responsibility of the railroad as regards the deaf”: From Vienna it is reported that in November, 1902, Franciska, the daughter

of Joseph Blaha, a farmer of Kunwitz, went to the River March to get some sand, and on her way back had the misfortune in crossing the railroad to be run over by a train whose approach it was impossible for her to notice with her eyes, as the track made a sharp curve at that point. She was hurt so badly that one foot had to be amputated and her spine was bent so as to produce a hunchback. Her father sued the railroad for damages, and although the railroad fought the case from one court to the other, maintaining that her father should not have allowed his deaf daughter to go out by herself, the supreme court of the empire at Vienna, to which the case had finally been taken, awarded her—as being deaf and therefore unable to hear the approach of the train—the sum of 10,000 crowns (\$1,930), and 90 thalers (18 cents) a day for life. “Industrial Education of the Deaf”: The Director of the School for the deaf at Posen, Prussia, Counsellor Radomski, addressed a petition to the Prussian Lower House to increase the premium which has to be paid to tradesmen for a deaf person whom they take as apprentice, from 150 to 200 marks. Owing to the rise in the price of all the necessities of life, tradesmen are more and more unwilling to take deaf persons at the lower premium, and the deaf, after leaving school, find it more difficult than formerly to obtain employment. The appropriation committee of the Lower House has referred the petition to the Royal Ministry of Public Instruction, and there are reasonable hopes that it will eventually be granted. Counsellor Radomski, after giving a brief history of his petition and the causes which led to it, gives some general statistics from which we quote the following: In the institutions for the deaf of Prussia there are at present 4118 pupils. As the course in nearly all these institutions occupies eight years, 519 pupils, on an average, leave the schools every year of which number about 75 per cent., or in round figures 400, take up some trade. If we make a deduction of about 10 per cent. for deaths, the premium has to be paid for 360, the annual sum for that purpose—assuming that among that number there are 200 males and 160 females—would, if the premium of the former were raised 50 and that of the latter 100 marks (to 200 for males and 250 for females), amount to only

26,000 marks (\$6,185) per annum; which the government can surely afford to pay. As an instance how a person deaf from birth can, by proper training, rise to prominence, we refer to a treatise by Dr. Walter Kuntze entitled, "An examination of the composition of German and American clover and various kinds of vetches during the different stages of their growth, and the influence of certain fertilizers on the composition of vetches"; which treatise (published in 1903) gained the author the degree of Doctor of Philosophy from the University of Leipzig. Although the treatise is by persons acquainted with the subject pronounced a classical work and of the greatest value to farmers, it is of special interest to all friends of the deaf as showing what our present education of the deaf can accomplish. Kuntze was born in Halle, and was so hard of hearing from his birth that it was only possible by means of the speaking tube to have some slight but very imperfect communication with him. His first instruction he received from a private teacher of the deaf in his native city, and then entered the institution for the deaf at Brunswick. Here he was soon considered the brightest scholar of the institution. In a short time he could rapidly read every word from the lips of the teacher, so much so that instruction could be imparted to him exactly as if he could hear. In 1882, Kuntze entered the institution at Hildesheim, where, for various reasons, he did not feel at home. When his father wrote to the director concerning his son, he replied, "Your son no longer needs a teacher of the deaf. Send him to some college!" Kuntze, therefore, returned to Halle, entered the college, passed his examinations brilliantly, and was fully determined to become a writer on scientific and philosophical subjects, when his health broke down; and he was advised by his physician to choose some career which would keep him in the open air most of the time. He, therefore, chose agriculture, studied practically on a farm in Mecklenburg; and now, totally restored, manages a large farm of his father's and devotes his leisure moments to scientific subjects bearing on agriculture. As Kuntze is comparatively young yet, it is certain that he will make a name for himself as an author and an authority in agriculture.

Rassegna della Educazione dei Sordomuti [Review of the Education of the Deaf], edited by E. Scuri. Naples. February, March, April and May.

The following from the American Annals for May is quoted:

"In reply to the criticism of the Annals of last September (Vol. XLVII, p. 379), upon the low standard of attainment advocated by Mr. G. Ferreri in the revised edition of his 'Il Sordomuto e la sua Educazione,' Mr. Ferreri explains in *Rassegna* for February, 1903, that he did not mean to assert that all the deaf without exception are inferior in mental capacity to hearing persons, nor to oppose under all circumstance provision for the higher education of such as are capable of pursuing it. In his argument he had especially in mind the schools of Italy, and it was in consideration of their limited resources that he advocated a low standard, believing that the aim should be to give a minimum instruction to as large a number as possible rather than a fuller instruction to a favored few. It does not then necessarily follow, as we inferred, that, if he is right, we in America, with our higher standard of attainment, are all wrong."

P. Fornari explains the debate which has arisen between the various writers concerning Oral instruction, in regard to the method of the first instruction, if it should be analytical or synthetical. That is, whether one should teach the entire word or its elements. Putting aside the choice of terms, the author holds that the first teaching of the deaf must be based upon the elements of the word, coming by degrees to the formation of the complete word. This is also the opinion of Kull, the principal of the school at Zurich, who treated the same subject at the Congress of 1901, held at Zurich, by the teachers of Switzerland and South Germany.

P. Fornari in an almost humorous article speaks of the requisites necessary for a good teacher of articulation, of which we give a brief summary:

Physical requisites:

1. A fine mouth of normal shape, size, and movement; with regular teeth, white and clean, having no windows or doors. The angle of the lower jaw must be such that in speaking the lower incisors are sufficiently separate from the upper

ones to allow the tongue to be seen. A flexible tongue, rather narrow and pointed.

2. A face, if not beautiful, at least interesting. It is not well, however, to have a face made irregular by the eyes or nose, or unsymmetrical in shape, or disfigured by scars or any other physical deformity. Nor a nervous face, or silly or even a stupid, rigid, wooden, apathetic one; and neither a gloomy face, nearly frowning, or too changeable, restless, without a smile, or apt to giggle or to sneer.

3. In person not deformed, of a dignified presence without affectation, erect carriage but not stiff.

4. A healthy, robust, strong constitution, capable of endurance.

5. A pronunciation without defect.

6. A valid age, that is from 20 to 40 years at the most, with the obligation of having the teeth replaced if any have been lost.

Mental requisites:

1. An intellectual patience.

2. An energetic character, frank, cheerful, and jovial.

3. Artistic taste.

4. Good temper.

5. To have an *ideal*, that is to aim for the greatest possible perfection.

G. Ferreri gives a specimen chapter of his notes on the schools of the United States. This volume, which promises to be interesting for all educators of the deaf, has the following title: "Education of the Deaf. Comparative notes in regard to the American Schools."

El Sordomudo Argentino [The Argentine Deaf-Mute]. Nos. 11, 12, and a supplementary December number. Buenos Aires.

A biographical sketch of Prof. P. Fornari, the former principal of the R. Normal School of Milan, precedes an article by him containing good advice to young teachers of the deaf. He recommends study and practical experience, for he believes that these two things will suffice to persuade one that the Oral Method is the best, the only one in the world which can really restore the deaf-mute to social life, transforming him into a complete man.

"The speech of many of the deaf as the principal motive for accusation against the German method," is the conclusion of a study published in the *Blätter für Taubstummenebildung*, and translated by G. Ferreri. P. Molina gives some statistical notes in regard to the education of the deaf in Spain. The figures show that although Spain is really the cradle of the instruction of the deaf, yet at present she provides this blessing for only a privileged few. The Institution of Madrid is the only official school for the deaf. Barcelona, Salamanca, Santiago, Burgos, Zaragoza, Sevilla e Valenza are the existing schools there. Add to these, three small private schools. Comparing the number of deaf now admitted to school, with the number of those existing in Spain, and the result is that only 3.42 per cent. enjoy at present the benefit of the schools. J. R. D'Alfonso concludes his study on the "Psychology of Language." The supplement to number 12 contains a report of the scholastic exercises held in Buenos Aires and in La Plata. The editor, J. Pablo Diaz Gomez, translates from Italian into Spanish the entire Appendix of the first volume of "The Deaf and his Education," by G. Ferreri, with the title: "The Teaching of Language to the Deaf."

L' Educazione dei Sordomuti [The Education of the Deaf], edited by G. Ferreri. Siena, Italy. March, April, May, June, and July.

The editor of this periodical, in order to demonstrate the historical importance of the works of Dr. Wallis, professor of mathematics at Oxford, in regard to the instruction of the deaf, has collected and translated the letters of Wallis to Boyle, Beverly, and Amman (1661-1700). These letters are preceded by some bibliographical notes in regard to the author, and by a bibliographical notice stating *where* and *how* these same letters were published. He also publishes a complete translation from the German of chapter XI of the new study of Dr. Bezold (Munich), upon the traces of hearing found by him in examining 456 deaf persons.

P. Fornari has undertaken the translation from the German of Dr. Gude's book about the Laws of Physiology and Psychology on the formation of movement and the instruction of the deaf. Copious notes in the translation illustrate and explain the worth of the German publication. E. Scuri refers to the conclusions and propositions made at the Italian Pedagogical Congress held at Naples (1900), upon the question: "What contribution can the elementary teacher give to the education of the deaf?" There is reproduced in this magazine the article of Mrs. S. J. Monro, published in the February number of our REVIEW. The editor calls the attention of the Italian teachers of the deaf to the importance and value of breathing through the nose, and expresses the hope that a special exercise for regulating the respiration of the deaf may result in improving their voice.

L'Educazione offers in each number abundant notices of schools for the deaf in every part of the world, and the editor wishes to ask the American Institutions through us, to send him the annual and biennial reports published in the United States.

The editor in speaking of the sad condition of deaf artisans and artists, proposes an exhibition of the works of art by the Italian deaf, in connection with the great exhibition which they are preparing to hold at Milan in 1905. This proposal is sustained and upheld by P. Fornari, who invites the friends of the deaf to join in a voluntary subscription for meeting the necessary expenses in order to realize this idea.

There is a collection of the notices which have reached Europe in regard to the acousticon of Mr. Hutchinson, but Italian criticism throws cold water upon the fire of enthusiasm aroused by these notices.

Report of the School for the Deaf at Porto, Portugal, for the year 1901-1902.

The director of the Deaf-Mute Institute Aranjo Porto, Portugal, in his annual report for the school year 1901-1902, reports forty-four pupils in the school at the beginning of the school term (June 30, 1901). During the year, 15 pupils entered

the school and 9 left, thus making a total of 49 pupils in the school at the beginning of the term 1902-1903. Of these, 40 were males and 9 females. Their ages ranged from 7 to 18 years. The director dwells upon the importance of limiting the time when pupils may enter the Institute to the first few days at the beginning of the school year, and so obviate the necessity of forming new classes, which greatly interferes with the regular course of instruction.

Special rooms have been fitted up during the year for manual training. In addition to receiving regular instruction in trades, the pupils do considerable work for private parties during the year. In January, 1902, the Institute opened a special course in pedagogy, attended by three pupils. The curriculum of the school embraces: Articulation and language, penmanship, elementary and geometrical drawing, freehand drawing, painting, water color, modeling, reading and text interpretation, grammar, analysis, arithmetic and the metrical system, geography, history of Portugal, ethics, gymnastics, shoemaking, tailoring, and printing.

“On the Necessity of a sure Means of Communication in the Instruction of the Deaf,” by G. Forchhammer, Director of the Institution for the Deaf at Nyborg, Denmark.

We may well congratulate Denmark, always prominent in the matter of deaf-mute education, on having produced a work like the present. It is a handsomely printed volume of 272 pages, in large 8 vo. and may well be termed a classical and exhaustive work on the subject, just such a one as we would expect from Mr. Forchhammer with his long and large experience. Our space is too limited for lengthy extracts from the book; we possibly do not agree with everything Mr. Forchhammer says, but the book in English form would certainly prove interesting also to American readers. We give here the headings of the different chapters: The terms “congruence” and “correspondence.” By the first term Mr. Forchhammer understands the agreeing, point for point, of two like series, e. g., two series of signs of language; whilst by the second term he understands the

agreeing of two series which are unlike. Speech as a means of communication for the deaf, with the two sub-headings: 1. Studies concerning the modulation of sounds, and 2, articulation in schools for the deaf. Speech as a means of communication with the deaf, lip-reading. Writing as an aid to the speech method, as a means of communication for pronunciation (writing sounds). Writing as a means of communication in language. Acquiring speech: with the following sub-headings: The way in which a normally endowed child acquires speech; Nature an aid to instruction; Instruction in foreign languages in the common schools; Imitative instruction in speech in schools for the deaf. Free means of communication: the "mouth-hand" system. The importance of remnants of hearing.

L'Idiozia [Idiocy], by Dr. Paul Sollier, Translation from English into Italian, with a Preface and Notes of P. Parise. Florence.

Our readers can see and consult the English edition of this book, in which they find much that is new in regard to child-study. The Italian edition adds to the scientific value of this work by a precious contribution of pedagogical experience. P. Parise, a teacher of the deaf according to the Oral Method, has attended for many years to the education of feeble-minded children, and therefore he is in a favorable condition for commenting upon the suggestions of science for the education of these unhappy children.

The work is divided into ten chapters: Definitions, Classifications, Causes, Pathological Anatomy, Symptomatology, Will, Diagnosis, Course and Duration, Complications and Results, Prognosis, Treatment.

Among the various definitions of idiocy given by the author, the opinion of Séguin seems quite important from the pedagogical point of view, according to whom the feeble-minded children are normal, but less advanced than other children of the same age, both in physical and psychic conditions: besides this he thinks that idiocy does not show itself until from

the eighth to the fifteenth year of age, and then in consequence of the condition of the brain.

Attention is the key to the diagnosis of idiocy, but the study of this presupposes the existence of sensation and perception. Attention is also the basis of the education and of the intellectual development. Therefore taking attention as the starting point of our researches, we can classify idiocy in the following manner: 1. Absolute idiocy (complete impossibility of attention); 2. simple idiocy (feebleness and difficulty of attention); imbecility (instability of attention).

Attention stands in relation with the liveliness of the first impressions. Hence as these are very faint in deficient children, it results that either their attention is not awakened, or only so with the greatest difficulty. This defect prevents the child from perceiving the sensations clearly, which in this way remain isolated and without any connection between them. From this comes the lack of ideas and of knowledge, and hence the state of idiocy which progresses continually. The arrest in psychic development in deaf children is due to the same cause; but as the intelligent deaf child can put his other senses into action, his attention can be awakened immediately and exercised. Therefore the preparatory schools and the kindergartens are to be recommended for deaf children who are not yet of a school age.

Their preparation for school cannot be accomplished better than in the kindergarten. Their attention is put into action not only in the brief lessons and in the Froebelian exercises, but also and perhaps still more in the common recreations. It is, however, necessary to distinguish between the two forms of attention. The first is spontaneous and natural, the other determined and acquired. In the examination of backward children, one should aim at the first form, because the second cannot be other than the result of their early education. In order to initiate this, one must make use of the credulity of children, derived from their lack of reflection. This in fact cannot come until later, that is, when the child in believing the first communications, begins to form ideas and to acquire primary knowledge.

Feeble-minded children are generally affected by perversion of the instincts. Since the most valuable instinct to be used for the early education is that of imitation, it is necessary for the teacher to discover if in the child the imitation is real, or if it is perverted into a stupid dissimulation. The importance of education for children who from physical or psychic defects require a special school, is enforced by the fact of the existence of a hereditary organic memory. Given this circumstance, the educator has a good foundation for his work of forming and developing the child, even when of very small intelligence. Another element upon which to base the education is constituted by the sentiments, afterwards come the emotions and their expression.

Many authors believed it wise to found the classification of idiocy upon the development of language; but comparative observations made between the symbolic forms of expression used by the idiotic and those used by normal children have not justified this classification.

In regard to the deaf, however, the examination of the sense of hearing should be the foundation of all. It is a fact well known to educators of the deaf, that often individuals with a perceptible remnant of hearing are the most intractable to learning the spoken word. In such cases one should distinguish well between idiocy and deaf-mutism, because the number of these hearing-mutes is increasing, and wrongly so, the percentage of the deaf of little intelligence.

The opposite case is also frequent, that there are idiots who succeed in pronouncing quite well, not only words but also entire sentences, without being able, however, to seize their meaning: and thus they offer us a proof that words and ideas can be entirely independent of each other.

Of great importance are the hints which the author Dr. Sollier, and the commentator P. Parise, give in this valuable pamphlet, upon the diagnosis, prognosis, and the treatment of idiocy, and of all the psychic disturbances of children of little intelligence. We believe that the study of this work must offer a secure basis also for the education of the deaf, and we would therefore recommend this work of Sollier to the educators of the deaf.

La Voce nel linguaggio e nel canto [The Voice in Language and in Song], by Prof. G. Ferreri, Docent in the R. University of Rome.

These are six lectures given at the Popular University of Rome by Prof. Gherardo Ferreri, a specialist for the diseases of the ear, nose, and throat. The author describes thoroughly the organs of speech, comparing them with those of the vertebrate animals. Afterwards he speaks about the voice and respiration, giving many valuable indications on the intensity, pitch, and quality of the voice. Many useful hints are given in connection with the art of phonation in speech and song. "In various individuals, says Prof. F., the differences of voice depend upon the size of the larynx; the larger it is, the lower the voice is; the smaller it is, the higher the voice is." The greatest defect of the voice of the deaf is included in this principle, and teachers should be careful to avoid developing to excess the larynx of their pupils. A favorable condition for a good phonation is the regular, rhythmical, and continuous movements of the chest and lungs. For this purpose it is necessary to provide a rather large development of the thorax. Special exercises are suggested in order to acquire a regular function of the respiration through the nose.

Visible Speech, the first attempt in Japan to adopt Professor A. Melville Bell's system in teaching the Japanese language; by Shinji Isawa. Tokyo, Japan.

The author is probably the most distinguished educational authority in Japan. Although he has written many educational treatises, and more exhaustive works devoted to various special phases of education, it appears he never prepared strictly text books for schools, but devoted his labors generally to elucidating principles and impressing upon others the necessity of their practical application. A man of a logical trend of mind and keen intellectual grasp, he early discovered in attempting to learn divers foreign languages, that owing to the want of any universally recognized scientific standard of phonetics, and the absence in his own country of properly qualified instructors, his

efforts to acquire correctness in foreign pronunciation were questionable. He therefore went abroad, and soon discovered that his apprehensions were well founded. Upon arrival in America, he soon realized that his pronunciation of English was faulty, and could not be understood, and he himself could not understand when he was spoken to in English. This fact disturbed him greatly until one day in 1876, at the Philadelphia Centennial Exposition, whilst engaged in examining the educational exhibits, he observed among other, to him, strange devices, an illustrated system of universal alphabets invented to teach the deaf how correctly to articulate English. He examined the subject critically, and felt convinced that if the deaf could thus be taught to articulate correctly, there was no reason why the system should not prove equally applicable in teaching English pronunciation correctly to the Japanese. He at once determined to seek the author and inventor of what was termed "Visible Speech," and went to Boston, where he was cordially received by Professor Bell, and, in a comparatively brief space of time, had his faults of speech effectually corrected. His personal practical experience caused Mr. Isawa to espouse the cause of "Visible Speech." On returning to Japan satisfied that the scientific basis of Visible Speech amply covered a scope wherewith primarily to secure a correct pronunciation of his own native language, (which, owing to faulty instruction had sadly deteriorated in certain provinces), he first set about to prepare the way by visiting, in 1899, localities in northern Japan where this deterioration had been most deplorable, and delivering lectures upon the subject before the educational association of that region. Although, as usual in such efforts, he encountered untold opposition on the part of those addicted to the errors they had grown up with, his labors nevertheless bore effective fruit, and two teachers were sent to Tokio to be instructed in Visible Speech and its adaptation in correcting faulty Japanese pronunciation. After completing their training, these instructors returned to their several provinces, and meeting with signal success in the schools where they taught, the system will no doubt eventually be generally adopted, as its prime mover, Mr. Isawa, at present, and for years past, has occupied the highest

position in the educational department of the imperial government of Japan. The author, however, does not content himself practically and scientifically in thus correcting the faults which crept into the pronunciation of the Japanese language owing to the want of a fixed educational standard, but insists that the same system shall be applied in Japanese institutions to the teaching of all foreign languages. It certainly speaks well for the keen discernment of Mr. Isawa in having discovered this effective means wherewith to secure, for all time, a correct pronunciation of the Japanese vernacular, and its endorsement by his government redounds anew to the credit and wisdom which uniformly in the interest of their people animate the rulers of Japan.

Monographs on the Education of the Blind and Deaf in the Kyoto, Japan, Institution.

Professor Nakamura, instructor of the blind, in part one, devotes considerable space to an argument showing the desirability and necessity of educating the blind, and states that their general trend has been to acquire skill in massage, or perfect themselves as musicians.

Part two of this volume is devoted to the instruction of the deaf, by Professor Watanabe, who states that dactylology and the Oral Method being considered preferable, are employed. Considerable space is given to show the manner of phonetically using the manual alphabet, and likewise to illustrations explanatory of instruction in articulation given by means of the Bell system of Visible Speech, which is here used in class instruction. In conclusion, apart from "Kohi Koho, the great scholar," and "Kekuichi, the statesman," the known occupations of 76 graduates are given as follows:

One each—hotel owner, dyer, umbrella maker, doll manufacturer, fan painter, screen manufacturer, shoemaker, scale-maker; two each—velvet artists, merchants, weavers, laborers; three each—furniture dealers, machinists, farmers; four each—teachers; six each—housekeepers; nine each—embroiderers; ten each—tailors; fifteen each—students, (clerks.)

Self-Instructor in Lip-Reading, Edward B. Nitchie, New York.

This book as the author informs us is intended not for the deaf-mute, but for those commonly called "hard-of-hearing." The author is himself of the latter class, so his work is "the outcome of experience, both as a lip-reader and as a teacher of lip-reading." The aim of the book is to enable the learning of the art of lip-reading without the direct help of a teacher, and the lessons and exercises present material in an orderly development to that end. The work is an octavo of 162 pages, and is published by the author, address 156 Fifth Ave., New York City.

The "Grange" Reading Book for Deaf Children, by S. Kuttner, Director of the Jews' Deaf and Dumb Home, London.

This is a little book of 24 pages, designed, as the author says in his preface, "to help the teacher in a small school, where it is so frequently desirable that one section of a class should be profitably occupied while another is receiving more direct attention." The first part of the work consists of charts made up of consonant and vowel elements with key words, in series and order consistent with the author's plan; the latter part consists of short language exercises, the greater number of them being based on the Moritz Hill pictures of which they aim to be descriptive. The book may be had of the author only, at 61 Nightingale Lane, Balham, London. Price 4 shillings (\$1.00) per dozen, postage paid.

EDITORIAL.

The Boston Meetings

The meeting of Department XVI—the Department of Special Education—of the National Educational Association, and the Annual Meeting of the American Association to Promote the Teaching of Speech to the Deaf, held in Boston during the summer, were both very successful and pleasant affairs. The Department meetings were conducted on different lines from those of previous years, in accordance with the change in its purposes and methods decided upon at the Minneapolis Convention. Instead of small, separate gatherings of teachers of the deaf, the blind, and the feeble-minded, each with its interest concentrated on its own special work, there were general sessions open to all who were connected with the education of children who, for any reason, required special means of instruction, and to those who might seek, in the experience of the teacher of the abnormal, a philosophic basis for the better development of the normal child. As thus conducted, the Department is no longer a loose confederation of distinct bodies without mutual interests and of but trifling importance as the duplicating in an imperfect manner the work of the associations of teachers of the three classes represented in it, but a compact organization, with a well defined purpose, that is certain in time to work much good, not only for defective children in special schools, but also for the many thousands who, while able to pursue their studies in the general schools, suffer from the ignorance of teachers regarding their needs and the best way of meeting them.

As the National Educational Association exerts a powerful influence upon legislation in school matters, the recommendations of this Department will carry much greater weight than those of an association of teachers of the deaf or of the blind,

and it may do much to further a better organization of the schools for these classes, and to induce greater liberality in their support. It cannot be questioned, for instance, that the able exposition made by Dr. E. A. Fay of the principle, that schools for the deaf and for the blind are not charitable but educational institutions, will not only obtain a much wider publicity but will appeal with greater force to the mind of the legislator and the publicist from the pages of the report of the National Educational Association than it would as part of the proceedings of the American Association of Teachers of the Deaf.

The Meeting of the American Association to Promote the Teaching of Speech to the Deaf was only for the transaction of necessary business. It is greatly to be regretted that a regular summer meeting with its school of practice could not be held, as it would certainly have been more largely attended than any previous meeting. The expressions of regret over the change in the programme that it was thought necessary to make late in the spring, were numerous and, in some quarters, where the circumstances were not fully understood, vigorous in tone. There appears to be a general sentiment in favor of regular annual meetings with a summer school for the training of teachers of speech, and this we believe the Association will shortly arrange for.

Those who attended the Department and the Association meetings are under obligations to Miss Sarah Fuller and her staff for the many courtesies shown them, and especially for the pleasant reception given them at the Horace Mann School on the evening of July 10th.

S. G. D.

The Death of Dr. Ladreit de Lacharriere Information comes of the death, on the 4th of August, 1903, at his home in Paris, of the eminent physician, Dr. Ladreit de Lacharrière, at 70 years of age. Dr. de Lacharrière will be remembered by readers of the REVIEW as the President of the Hearing Section of the International Congress for the study of questions relating

to the education and assistance of the deaf, held at Paris in the summer of 1900, and it was undoubtedly due to his earnest enthusiasm and unwearied labors that the great success of the Congress was due. Dr. de Lacharrière held for four years the position of assistant physician, and for thirty-two years following, the position of physician-in-chief to the National Institution for Deaf-Mutes in Paris, from which latter position he retired in 1899. He took a lively interest in all questions relating to the welfare and advancement of the deaf, informing himself fully upon them. On the question of methods he was an unwavering oralist. The high esteem in which he was held by his countrymen is evidenced by his numerous honors and offices, the government having decorated him an Officer of the Legion of Honor of France, and he being also an Officer of the Academy, a Commander of the Order of Isabelle la Catholique, and Chevalier of the Orders of Leopold de Belgique and of Christ du Portugal. For thirty years he was at the head of the "Societe Centrale d'Education et d'Assistance des Sourds-Muets," and latterly occupied the honorary position of general secretary to the society.

F. W. B.

There have been few changes of importance
Among the Schools made among the executive officers of the schools for the deaf during the past summer. Mr. Charles P. Gillett, who was appointed acting superintendent of the Jacksonville, Ill., school on the death of Dr. Gordon, has been elected superintendent. His long experience as a teacher and in other capacities in connection with the institution, and the traditions inherited from his noble father, Dr. Philip G. Gillett, make him a man peculiarly fitted for the position.

Mr. James Simpson, superintendent of the South Dakota School for twenty years, has resigned to devote his whole attention to stock farming. He is succeeded by Miss Dora Donald, lately superintendent of the South Dakota School for the Blind, and known to our profession for her remarkable success in teaching the deaf-blind girl Linnie Haguewood.

Dr. Job Williams of the American School at Hartford, who was last year given six months' leave of absence, has resumed his duties, much improved in health.

There have been numerous changes among the teachers of the schools. Among the more important we note the retirement of Miss Harriet E. Hamilton, who has been connected with the Rochester, N. Y., school since it was opened, and that of Mr. Linnaeus Roberts, a prominent member of the Western Pennsylvania School staff.

Among material improvements accomplished or projected are, at the Kentucky School, a new steam heating and power plant and laundry building, and two new dormitories, to accommodate one hundred and twenty pupils; at the New York (Fanwood) School, alterations in stairways and erection of fire escapes at a cost \$18,000; at the Mt. Airy, Pennsylvania, School, the addition of a large cylinder press to the equipment of the printing office, and minor improvements; at the Tennessee School, the erection of a cottage for boys, to cost \$8,500; at the Utah School, a new heating plant in a separate building, and a large gymnasium and shop building, also other improvements, at a total outlay of \$20,000; at the Virginia School, the erection of a new building; at the North Dakota School, improvements at a cost of \$20,000; at the Minnesota School, an addition to the cabinet shop, and a new school building of stone to be completed by January 1st; at the Montana School, a new power-house and laundry, and a dynamo for electric lighting; at the Illinois School, a new chapel, studio and library building is to be erected, and new steam and electric plants will be installed.

Mrs. Margulies and Mrs. Anderson who have jointly conducted a private school at Washington Heights, New York, have dissolved partnership, the former now conducting the "Reno Margulies School for Children with Defective Hearing," at 534 W. 187th Street, and the latter, "The Washington Heights School for Children with Defective Hearing," at 847 St. Nicholas Avenue. The Wright Oral School has been removed to No. 1 Mt. Morris Park, New York City.

S. G. D.

TESTIMONIAL TO DR. J. C. GORDON.

At a special meeting of the Board of Directors of the American Association to Promote the Teaching of Speech to the Deaf, held in Boston, July 8th, 1903; the following testimonial to Dr. Joseph C. Gordon was adopted:

Resolved, That by the death of Dr. Joseph C. Gordon, the Directors of the American Association to Promote the Teaching of Speech to the Deaf have lost a cherished colleague, the cause of speech-teaching a most sincere and zealous friend, the educational world a brilliant scholar and teacher, and the community at large a high-minded, noble hearted, and public spirited citizen.

Resolved, That the Directors tender their sincere sympathy to the family of their lamented associate for the great loss they have sustained.

Resolved, That the Secretary of the Board be directed to enter these resolutions upon a separate page of the minutes, and to send a copy of them to the greatly bereaved family.

NEW MEMBERS.

The following named persons have been elected to membership in the American Association to Promote the Teaching of Speech to the Deaf by vote of the Board of Directors. The list includes those elected since the last report :

Bahr, Lulu C., San Bernardino, California.
Bell, Lucie Lee, School for the Deaf, Danville, Ky.
Bryant, Belle, 809 Holland St., Wilkinsburg, Pa.
Carlisle, Charles, Big Rapids, Michigan.
Cason, Mary, Romney, West Virginia.
Connick, Thomas, Dixie, Walla Walla Co., Washington.
Curtis, Louise, School for the Deaf, Jacksonville, Ill.
Dunbar, Eva, Staunton, Va.
Fairbank, Marion E., School for the Deaf, Austin, Texas.
Fechheimer, Edwin S., Winnetka, Illinois.
Field, Fannie, School for the Deaf, Baton Rouge, La.
Fisk, Pauline, Crosby Place, Brattleboro, Vermont.
French, Martha F., 983 Hancock St., Wollaston, Mass.
Graham, James D., Pasadena, Cal.
Gordon, Mrs. John R., Portland, Conn.
Gottlieb, Leo, Trinidad, Colorado.
Greeno, Mrs. Isador L., 338 N. State street, Chicago, Ill.
Griswold, Mary B., 502 E. First St., Duluth, Minn.

Herman, Kate S., Olathe, Kan.
Humphrey, J. F., 122 E. Platte St., Colorado Springs, Col.
Johnson, Fanny, School for the Deaf, Austin, Texas.
Keppel, Mark, Room 47, Court House, Los Angeles, Cal.
Libby, Mabelle J., 291 Spring St., Portland, Maine.
Lightfoot, A. B., Big Rapids, Michigan.
Lindsey, J. H., Charlottesville, Va.
McClure, D. E., Lansing, Michigan.
McDermid, W. D., School for the Deaf, Winnipeg, Manitoba.
Millard, J. B., 315 S. Broadway, Los Angeles, Cal.
Nitchie, Edward B., 156 Fifth Ave., New York, N. Y.
Nixon, Bertha M., 246 Prospect St., Cleveland, Ohio.
Pope, Alvin E., St. Louis, Mo.
Rogers, Howard J., St. Louis, Mo.
Sanxay, Olive, School for the Deaf, Indianapolis, Ind.
Sauter, Emily E., School for the Deaf, Boulder, Montana.
Schaffer, Anna E., Supervisor Schools for Deaf, Madison, Wis.
Shermer, Charlotte, Sparta, Wisconsin.
Smith, Ina, S. Farwell St., Eau Claire, Wis.
Stuart, Ethel M., School for the Deaf, Halifax, N. S.
Unkart, Gustava, School for the Deaf, Rome, N. Y.
Woodruff, Miss M. L., Sch. for the Deaf, Colorado Springs, Col.

NOTES AND NOTICES.

Copies of the proceedings and the papers in full as read at the Boston meeting of the Department of Special Education, N. E. A., may be obtained as a separate pamphlet by addressing Irwin Shepard, Secretary of the National Educational Association, Winona, Minn. Price, 10 cents per copy.

The name of the chief executive officer of the Oklahoma school for the deaf was given in the statistical tables of our June number as Pearl H. Dunham. It should have been H. C. Beamer, who is contractor and superintendent in charge of the school.

Teachers wishing positions and Superintendents wishing teachers may avail themselves of the office of the General Secretary of the American Association to Promote the Teaching of Speech to the Deaf so far as it may be of service to them. The General Secretary aims to keep a list of teachers, and one of Superintendents, belonging to the above classes, ready for use by any person who may write for them.

THE ASSOCIATION REVIEW is a publication of the American Association to Promote the Teaching of Speech to the Deaf. It is sent free to Active Members of the Association. Active membership is obtained upon payment to the Treasurer of the membership fee of two dollars (\$2), or its equivalent in foreign currency—8s. 4d. in English money; 8m. 2pfg. in German money; 10fr. 2c. in French money; 7 kr. 50 ore. in Norwegian, Swedish, and Danish money; and 10l. 2c. in Italian money. Postal money orders should be drawn on Philadelphia, in favor of F. W. Booth.

Reprints in pamphlet form of the series of papers that have appeared in recent numbers of the REVIEW on "Formation and Development of Elementary English Sounds," by Caroline A. Yale, may be obtained by addressing the office of the General Secretary. Price for single copies, 25 cents.

Reprints in pamphlet form of "My List of Homophenous Words," by Emma Snow, may be obtained through the office of the General Secretary. Price for single copies, 25 cents.

Instruction for the Deaf.

A private school for pupils with defective hearing which is equipped and conducted on the same scale as the finest private schools of New York. Instruction is wholly oral. Preparation for any college or for business. Lip-reading taught to adults. Hearing developed by scientific treatment. While adults are received, it is greatly to the advantage of children to begin their study before reaching the age of six.

THE WRIGHT ORAL SCHOOL.

1 Mt. Morris Park, New York City.

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ON TEACHING THE SURD, OR DEAF AND CONSEQUENTLY DUMB, TO SPEAK.¹

BY WILLIAM THORNTON.²

The difficulties under which those have laboured, who have attempted to teach the surd, and consequently dumb to speak, have prevented many from engaging in a labour that can scarcely be exceeded in utility; for some of those to whom nature has denied particular faculties have in other respects been the boast of the human species; and whoever supplies the defects of for-

¹ First published in 1793, in Volume III of "Transactions of the American Philosophical Society, held at Philadelphia, for Promoting Useful Knowledge." The essay immediately follows in the "Transactions" a dissertation by the author, of which the following is the complete caption:

"PRIZE DISSERTATION,

which was honored with the Magellanic Gold Medal, by the Philosophical Society January, 1793.

CADMUS, or a TREATISE on the ELEMENTS of WRITTEN LANGUAGE, illustrating, by a philosophical Division of SPEECH, the Power of each Character, thereby mutually fixing the Orthography and Orthoepey.

CUR NESCIRE, PUDENS PRAVE, QUAM DISCERE MALO?
Hor: Ars Poet: v. 88.

With an ESSAY on the mode of teaching the DEAF, or SURD and consequently DUMB, to SPEAK."

[In this republication of the essay effort has been made to preserve the spelling, punctuation, paragraphing, and other typographical features of the original publication.—ED. REVIEW.]

² For a sketch of the life of William Thornton, with portrait, see ASSOCIATION REVIEW, Vol. II, No. 2.

mation, and gives to man the means of surmounting natural impediments, must be considered as a benefactor. There have been many successful attempts, in divers nations, to procure to the deaf and dumb the modes of acquiring and communicating ideas.—The methods however are slow and imperfect.—The written and spoken languages are so different, that they become to such pupils two distinct studies. It is necessary that they acquire a knowledge of objects, by seeing their use, that they also become acquainted with the several words which when written become the representatives of these objects, and besides the difficulties which present themselves in pronunciation, they are to remember that the different words which are written, and sometimes with nearly the same letters, are of different signification; and in speaking require different pronunciations of the same character—this is an obstacle that can not be possibly avoided by the present mode of writing, and the languages become as difficult as Hieroglyphics.

Some of the difficulties of acquiring a language when deaf, may be conceived by those that are experienced in learning foreign tongues, where they are not commonly spoken, although aided by translations and dictionaries; but the man that hears nothing, has not the advantage of a child who learns by the constant chat of his parents and attendants, and who can obtain no pleasures but through the medium of speech—he hears and is constantly learning—to teach him is the amusement of every one; but the deaf receives his stated lessons, difficultly and seldom.—There is no book which by the figures or drawings of things have appropriate terms, nor is there a language which has appropriate characters.—The more I revolve in my mind this subject, the more I am astonished that even the most improved nations have neglected so important a matter as that of correcting their language; I know of none, not even the *Italian,

*“Ciascheduno sa, che, come non v' è cosa, che più dispiaccia a Dio, che l'ingratitude, ed inosservanza de' suoi precetti; così non v' è niente che cagioni maggiormente la desolazione dell' universo, che la cecità, e la superbia degli uomini. la pazzia de' Gentili, l'ignoranza, e l'ostinazione de' Giudei, e Scismatici.”

Corrected.

Tfiascheduno sa, ke kome, non v' è coza, ke piu dispiatfia a Dio, ke

that is not replete with absurdity; and I shall endeavour to shew the facility with which the deaf might be taught to speak, if proper attention were once paid to this important point.

I have attempted to shew that in the English language there are thirty characters, and must suppose a †dictionary according to this scheme of the alphabet, upon which I mean to build

*the Method of teaching the Surd and consequently
Dumb to speak.*

It is necessary to examine first, whether the dumbness be occasioned by merely the want of hearing, or by malconformation of the organs of speech. If the latter there is no occasion to proceed, but if the former be the cause, the method of attempting to remove such an impediment may be pursued in the following manner.

1st, They must be led, if young, to attempt to pronounce, by imitating the motions of children in speaking, and, as every thing at first would appear to them unmeaning, a child who can speak must be told to pronounce the letters, which you desire the deaf child to learn. If you succeed with difficulty, to prevent discouraging the deaf, the child who speaks must be made to pronounce slowly, distinctly, and with many repetitions, that the deaf may suppose the other to be in the same predicament; but if you have two deaf persons to teach at once, the first lessons only need be given in this manner, for the progress of both will be at first perhaps much alike.

2dly, The pupil must be not only sensible when he makes the proper sound himself, but must also be able to distinguish these sounds in others. In teaching to pronounce, you must open the mouth, and shew the situation of your tongue as nearly as you can, then dispose your lips in such a manner as to give the sound, making apparently a more forcible exertion than com-

l'ingratitude ed inosservantsa de suoi preetfetti; cossi non v' è niente ke kadjioni madjormennte la desolatsione dell' universo, ke la tsetfita, e la superbia del* i omini, la patsia de' Djentili, l'iniorantsa, e l'ostinatsione de Djudeei, e fizmatitfi.

*Requires a new character (the aspirate of l)

†Mr. Sheridan's or Dr. Kenrick's may give some aid, till a dictionary be published upon this plan.

mon. The pupil will try to imitate it. He will make no doubt a sound of some sort, either vocal or aspirate—If that sound be contained in the language you mean to teach him, point immediately to the letter which you find is the symbol, and repeat it so often, that he can neither forget it, nor have any idea of the symbol without that sound, nor of the sound without the symbol—If the sound be vocal let him feel at his own throat, and at yours, that he may be made sensible by the external touch that the sounds are the same, and he will with more facility be enabled to give the aspirates by pronouncing them without a tremulous motion in the throat, which is the sole external mode of learning him the difference. When you teach the aspirate of any letter by a simple breathing, the organs being somewhat similarly disposed, he perhaps may stumble upon another vocal or aspirate: if so, shew him the letter he obtains by the error, as if you had no intention, in that instance, to teach the letter in affinity with the last; and let him repeat the sound, whether vocal or aspirate, till he is perfectly acquainted with it, and the appropriated character. You must then turn to another, taking care, that while he acquires, he does not forget, and let him often repeat them. When you have proceeded through the greatest part of the letters in this manner, and find that either the vowels or aspirates which correspond to each other are wanted, you must take such as it would be proper to begin with, and I think that none would serve better than v—f ; j—sh¹ ; z—s ; th¹—th¹ ; in which, if the pupil be sensible, he will soon discover a connection, and will be induced to search for the same affinities in the other letters, whether the language he learns contains them or not—It will be necessary, according to the age and disposition of the pupil, to use different methods of disposing his organs ; not only by letting him feel, how your tongue is raised to the roof of your mouth, pushed forward, depressed, withdrawn, &c. but also to dispose his, by your fingers, and have a looking glass always present, to shew him wherein he errs in not justly imitat-

¹In the original publication this element is represented by one of the characters of a “universal alphabet” presented and discussed in the preceding dissertation. Not having the character in type, its English equivalent is substituted.—ED. REVIEW.]

ing you ; and also to let him see when he is right in his efforts. This will teach him what is necessary.

3dly, To know what others say, when they converse with, or ask him any question. This is the most difficult in teaching the surd, because most of the letters are formed in the mouth and throat, out of sight ; and here vision alone obtains the meaning. The mirror, however, will facilitate much the mode of learning what others say, by the deaf man's conversing with himself before it, but in presence of his teacher, to prevent his making mistakes, in the formation of the true sounds : and there are more guides in acquiring what words are spoken by others, than people in general imagine ; for so many of the letters which make a visible effect upon the organs, in their formation, enter into the composition of words, which may indeed contain many that do not make much effect, that if all the former were written down, it would give to the eye, a kind of short-hand ; and is almost as easily caught by the watchful eye of the attentive deaf, as short-hand without vowels is read by the experienced stenographer. Both arts require long practice, but both are very attainable.

When he has learned the true *sounds of the thirty letters, in the English language, he will be capable of reading as well as of speaking, and he ought to have a catalogue of objects, designed or represented, that he may affix proper ideas to proper terms.—Thus a child may be taught to read, to speak, to understand others, to write, and obtain a knowledge of things at the same time.

The greatest difficulty that the deaf have to surmount, in making a quick progress, in general conversation, has been the want of a proper dictionary, or, rather, of a properly written language ; for if they pronounce the letters well, and attempt to join them, so as to read words as they are now written, it would be unintelligible.—The dictionaries of Dr. Kenrick and Mr. Sheridan, would very much assist at present, for the deaf should have an opportunity of acquiring the sounds of words, whenever they

*See the preceding dissertation Page 280 et seq:—also the table of sounds.

were disposed to learn, without being obliged to have recourse to others: but there are many defects, as well as mistakes, in Mr. Sheridan's, and though I have not seen Dr. Kenrick's, I know the manner, and it must also be defective, because in neither work, have letters been invented for the sounds not before represented.—If the dumb had the advantage of learning a language properly spelled, every time they read in a book, the sounds would be impressed upon the mind, and reading would offer an eternal source of improvement, both in correct speaking, and in matter; and thus might a person, who had once learned his letters, be capable of reading everything correctly, and a child would not have to learn a language in merely learning to read; thirty sounds only would be required, and he would have no idea of the possibility of substituting a wrong letter in writing, for one which he could properly pronounce; thus, spelling would not be a study in writing. I speak now, not only in favor of the deaf and consequently dumb, but of all others, who have not yet learned to read. Some of these ideas I have often repeated, but repetition is admissible, when we consider with how much difficulty truth is made to grow in a soil where prejudice has permitted error to take deep root.

Many of the dumb learn to communicate by their fingers, forming an alphabet, by pointing at each finger, by shutting them separately, by laying various numbers of fingers upon the other hand, first on one side, then on the other, and by different signs, passing through the whole scale of sounds—and composing words by visible motions, which are agreed upon by a friend. They also write, and learn the meaning of things, by referring to the representatives of words instead of the words themselves, and the meaning of things would be as easily taught by this mode as by the ear, provided there were as much repetition in one case as in the other.

It is necessary, that the dumb have each a book, in which should be written under proper heads, the names of familiar objects, and under them those things which have a connection, beginning with genera, and descending to species.

It would be proper to have large tables of classes, in the following manner, which would occupy the side of a room.

ANIMALS							
Mankind		Beasts		Birds	Fishes	Rept: Insects, Amph:	
Man, woman child,	Carnivorous	Graminivorous		water fowl	Sea, fresh water		
	Tyger, &c.	Horse	Horned Cattle				
	Lion	He-she,	Horse, Mare,	Bull, Cow, Calf	Sheep, &c.	Birds of prey &c.	
		He-she	Foal				
				Ram, Ewe Lamb			
VEGETABLES							
Trees		Shrubs		Plants			
MINERALS							
Platina	Gold	Silver	Copper	Tin	Lead	&c.	
STONES							
Diamond	Sapphire	Ruby,	Topaz	Emerald &c.	Flint	Calcareous, &c.	
EARTHS							
Vegetable	Okres or Calces		Clays	Marles	&c.		

As the pupil will be taught to read, to speak, to write and understand things at once, the teacher should force him to leave no name unpronounced, unwritten, or unread; and the pupil should be, at the same time, taught to observe the motions made by the organs of speech in his preceptor, and likewise to examine his own in a glass, and to draw the object, which may be done in a book either arranged according to the use of the thing, or put promiscuously with its name written under; and if the word be incorrectly spelled, to write it properly besides, or look in one of the corrected dictionaries. All these methods will impress his mind so strongly, that he will seldom have occasion to refer to his book; and by this method he will also attain to a great proficiency in drawing.

The actions and passions should be acted to the pupil, and no movement made without shewing its meaning, and noting it down by writing, that words may increase in exact proportion to the increase of knowledge, and the progress which a student will make by this method will in a short time be astonishing.

If a teacher were to undertake the instruction of several at once, which would indeed be most adviseable, it would be exceedingly proper to procure as many prints or drawings of common objects as could be had, and even of the same objects in different postures and positions, with the name and action written beneath, and these arranged under different heads according to their relation to each other. The walls of the room might be covered with them, screens, portfolios and books also contain others, to which they might constantly have access. Colors ought also to be painted in squares, with their names attached, after them the shades and the various colors obtained by mixing simple bodies. They ought also to go through various courses of natural history, natural and experimental philosophy, including chemistry, by which they will see the extensive variety that even artificial mixtures and combinations of bodies will produce. The names, the processes, and results should be written, that nothing be lost. Space and time should be measured, and all the parts of discourse made familiar by examples, as a sensible man would see occasion.

The utility of attempting to teach the dumb to speak, has

indeed been disputed by many, not only on account of the difficulties which are judged insurmountable, the imperfect manner in which the pupils articulate, and the disagreeable noise they make in endeavouring to pronounce, but also on account of the difficulty with which they understand what others say, and more especially when they can be comprehended so well by writing, and made useful members of society by drawing.—The imperfect manner in which they speak depends not upon the pupil, if of common capacity, but upon the teacher; and I am confident, from short trials I have made, that the art is to be perfectly obtained by the foregoing method. The difficulty of understanding what others say I have already considered (page 410 art. 3d) and though writing is a very necessary qualification, yet pen and paper are not always at hand. Drawing I approve of, as useful to every one, and perhaps more particularly so to a person whose want of natural faculties deprives him of many sources of amusement. But speech is so useful upon every occasion, that to attain it is to facilitate the very means of existence: for if a deaf man was even always provided with a book and pencil he would often meet with persons who could not read, and one sentence if only imperfectly spoken would convey more meaning than all the gestures and signs which would be made.

A deaf person not perfectly skilled in reading words from the lips, or who should ask anything in the dark would be able to procure common information by putting various questions, and by telling the person that, as he is deaf, he requests answers by signs, which he will direct him to change according to circumstances.—If he had lost his way, if he enquired for any one, if he wanted to purchase anything, and in all the common occurrences of life, his speech would be so useful, that it would certainly more than repay the trouble of obtaining it; especially as it would be a mode of facilitating every other acquirement.

AN EDUCATIONAL NEGLECT.¹

EDWARD B. NITCHIE, NEW YORK,

Many cases of apparent dullness or inattention among school children are really only the result of deafness. Perfect hearing in both ears is possessed by less than five per cent. of the population, but the vast majority of the remaining 95 per cent. are entirely unaware of their aural defects. So among school children, in cases of backwardness caused by deafness, very few of the children know that they are deaf. Several years ago in New York City, Dr. Sexton found in a certain school 76 cases of deafness, of which only one had been known before. In Terre Haute, Ind., Dr. Worrell discovered 98 cases, only one of which, again, had previously been known. The ignorance of teacher and child in regard to these cases misleads them both to attribute an inherent stupidity to what is actually caused by deafness. Parents who find their children gradually falling behind believe the same. And when the pupils reach the higher grades and an age when they are sensitive to the apparent difference between themselves and other children, they drop out of school. Thus those, who because of their physical handicap are really in greater need of a thorough education than their brighter fellows, are deprived of it through ignorance of their true condition.

This matter was suggested to me by Dr. H. A. Alderton, of Brooklyn. Desiring definite information as to the conditions prevailing in our public schools, I sent letters of inquiry to the public school authorities of the first twenty-five cities in population in the United States, and of six other cities selected because of their location or their reputation. From these thirty-one letters twenty-three replies were received. While not conclusive, they indicate a grave neglect in this matter on the part of a very

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large proportion of the school authorities. The questions were as follows:

1. Is the hearing of the school children tested ?
2. How often ?
3. What per cent. of the children are found defective in one or both ears ?
4. What is done in the way of seating to help those found to have defective hearing ? With what results ?
5. What, if anything, is done in the way of instruction in lip-reading to help such children ? With what results ?

Of the twenty-three replies received, only eight give the direct affirmative to the first question. One of these, Boston, states that medical visitors test the hearing of such children as attract the attention of the teacher. Inasmuch as the teacher is as often ignorant of the deafness of a child as is the child himself, such testing fails to discover previously unknown cases. Of the other replies, New York, Philadelphia, and Minneapolis give a qualified affirmative, such as "no tabulated data," "not regularly," "only by the teachers." The remaining twelve replies give an unqualified "no," though a few, such as Baltimore where the schools have recently been reorganized, and Washington City, hope to do something in the near future. Providence has done much for backward children in general, but nothing in particular for the class of backward children we are at present considering. A number of replies mention institutions for the deaf and dumb, but such work does not touch upon the problem in hand.

Usually a "no" to the first question carried with it a total lack of information in regard to the other questions. But in a few instances answers were essayed in regard to some of them. Washington City and St. Paul, though making no tests, state that the per cent. of defective hearing is "very small," or such cases "seem to be few." When they are recognized, however, the pupils are given front seats. In Cincinnati and Jersey City, where also no tests are made, care is taken to secure proper seating for all known cases of deafness. "Generally good results," is the Cincinnati report. "Children reputedly slow have shown rapid improvement." In reply to the fifth question, Mr. Henry

Snyder, Superintendent of the Jersey City Schools, says: "Lip-reading is, of course, used as an aid, in fact, must be used, in connection with the teaching of phonics."

It becomes of interest to examine the results in those cities where authorized tests have been made.

In Springfield, Mass., in the spring of 1901, tests were made by five inspectors. In all the schools out of 8,535 pupils examined, 407, or little less than five per cent., were found to have defective hearing. In one school the percentage of defects was found to be as high as 33, while in others it was less than one. The only reasonable explanation of so wide a variation is that different standards were employed by the different inspectors. The examination had a primary value, however, in pointing out to teachers many cases of previously unknown deafness, and thus allowing proper seating and desking to be made in those cases. The examination also had a secondary value which will be spoken of later. In reply to my fifth question, Mr. Thomas M. Balliet, Superintendent of the Springfield Schools, says: "Nothing has been done to instruct pupils, whose hearing is defective, in lip-reading. This ought to be done."

In New Orleans the children are examined at irregular intervals, but no statistics have been kept. Proper seating is resorted to in all discovered cases of deafness, but nothing is done in the way of lip-reading. In Milwaukee tests were made two years ago, when 7.25 per cent. of the pupils were found to have defective hearing. In Denver and Los Angeles the tests are made annually, but the per cent. of defectives is not given. In all these cities, proper seating of the children gives "satisfactory" or "generally favorable" results.

In Cleveland thoroughly systematic attention is given to this matter. Tests are made of all pupils when they enter school, and those found defective are tested at the beginning of each subsequent year. By Gale's test, approximately two per cent. are found to be defective. This test is simple, and can be made directly by the teacher; and the first week of the school year is largely given up to making these tests, and similar tests for defective vision, and seating pupils accordingly. The results of proper seating are reported as "*very beneficial*."

Chicago bears the palm for work that has been done to discover and help all defective pupils. The Department of Child Study has had this matter in charge for some years. The test for ear defects is made by an experienced examiner using Prof. Seashore's invention, the audiometer. Such tests have the advantage of being absolutely reliable for purposes of statistics, inasmuch as no differences in the human voice or in the loudness of a watch tick enter into the test in any way. By these tests in Chicago made on 5,915 pupils ranging from eight to eighteen years of age, over 16 per cent. were found to be defective in one or both ears, by "defective" meaning that a pupil "would be seriously inconvenienced in detecting sounds of medium intensity,—*i. e.*, four or more points below the norm." This percentage is seen to be from twice to eight times as large as in those other cities where the tests were not made so carefully.

Further examination was made in Chicago to discover what bearing defective hearing had upon school standing. All the pupils were divided into two groups, those in or above the proper grade for the respective ages being placed in one group, while those below grade formed the second group. Of those below grade 18.68 per cent. had defective hearing, while of those at or above grade the per cent. was only 14.43. Thus, while defective hearing does not mean that the child so afflicted is *necessarily* dull, it does mean that on the average such defects do constitute a serious handicap to any child's work in school. The exact figures are given in the subjoined table:

	Children examined.	At or above grade.	Below grade.
Number tested	5,915	3,609	2,306
Defective in one or both ears.....	952	521	431
Per cent. defective.....	16.09	14.43	18.68

The percentages of those at or above grade and of those below grade were found to be surprisingly uniform throughout each age from eight to eighteen.

In Chicago, as in other cities, the results of proper seating are found to be "good." Nothing in general is done in the way of instruction in lip-reading, but occasionally a child is allowed

to enter one of the rooms for the deaf and dumb for a few weeks' instruction "with good results."

Thus, while little has been done for these children throughout the schools generally, the results in the schools that have done something are a lesson for those other schools where the matter has been almost or quite neglected. The first thing is to find out which children are the defectives. No teacher needs wait for an "appropriation" to do this. Simple and sufficiently satisfactory is Gale's test as used in Cleveland. The pupil stands at the blackboard with his back turned. The teacher dictates from the desk, speaking in the tone of voice used in teaching, and the pupil writes down the dictation. If the pupil does not hear well, the teacher advances the distance of one seat and desk, and again dictates, and continues so to advance until the pupil understands readily. The distance between the teacher and pupil is the distance at which he should be seated to do satisfactory work. The test should be made with each ear separately, the pupil stopping one ear with a cloth over his finger. If the pupil is found defective in only one ear, care should be taken not to seat him on the wrong side of the room. The results of intelligent seating in cases of defective hearing have been so uniformly excellent, that failure to discover such cases and to seat them properly is inexcusable. From the smallest country school to the largest city school, this should be done at the beginning of each school year, or with each term when a change of teachers is made.

Further, I have the faith to say that much can be done through instruction in lip-reading. As a teacher of lip-reading to the adult hard-of-hearing and as one deaf himself, I know what a help lip-reading is. The mere habit of watching the mouth helps even those who have no instruction in lip-reading whatever. Teachers should direct all pupils of defective hearing so to watch the mouth. As to systematic instruction, though work for such children has never been done, it would be a comparatively simple matter to adapt some of the existing methods of teaching to this special work. Of course, expert instruction would be preferable, but the subject is not one too difficult for the average teacher; a little application would quickly make

most of them competent to give it. The time spent need not be over one hour a week, preferably split into two half hours. The results of such instruction with adults makes me confident in saying that it would greatly help these school children too. More, it would be of very great value to them not only in school but through life.

One further result of discovering cases of defective hearing: In Chicago, Cleveland, and Springfield, whenever a child is found to have any sense defect, a report is made to the child's parents with the suggestion that the family physician be consulted. The great majority of cases of deafness are due to catarrh; if treated in time, they are preventable and curable. But neglected, they are the most difficult cases of deafness that an aurist is ever asked to cure. By making such reports to parents, therefore, many a case of adult deafness would be prevented. Dr. A. Graham Bell is authority for the statement that there are in this country 300,000 persons under twenty-five years of age who have become deaf since the age of twenty. Many of these cases would have been prevented if proper tests and treatment had been given during the school years.

AN AGRICULTURAL SCHOOL FOR THE DEAF.

LARS A. HAVSTAD, CHRISTIANIA, NORWAY.

In Norway, as in most other countries, the deaf are generally taught a trade, and become tailors, shoemakers, joiners, carpenters, printers, painters, sometimes also lithographers, engravers, and so on. The consequence is that they will in most cases seek employment in the towns (cities), where there are gathered a large number of deaf people. This is not always for their good.

Seeing this Mr. Eyvind Boyesen, a gentleman who is very well acquainted with the needs of the deaf, having for several years taught in a school for deaf children, and done much service to the Norwegian Association of the Deaf at Christiania, formed the resolution to give the deaf an opportunity of residing and making their livelihood in the country. In a short time he raised by private subscriptions the amount of 30,000 kr. (\$8,000), and bought for 35,000 kr. a fine farm near Sandefjord, not far from the mouth of the Christiania fjord and quite close to the spot where the famed Viking Ship was exhumated some fifteen years ago. Here he has organized an agricultural school for young deaf men, giving them the elements of agronomy, cattle-tending, dairy work, etc., and teaching them to keep in repair the agricultural implements.

This spring the first pupils, six young men of about twenty, came to attend the course (which will last two years), and with them, and without having any hired hands, Mr. Boyesen was able to do all the farm work during the spring, summer, and fall. The products are sold at the little neighboring city and bathing place of Sandefjord. All these young deaf men speak, and Mr. Boyesen, his family, and servants address them orally, without signs. It was remarkable to see that those coming from the country, where they had been living without intercourse with other deaf, invariably spoke better than those having lived in

town after having graduated from the elementary schools.

The new agricultural school has no state subsidy other than the salary paid to the principal. The several local authorities pay for the students belonging to them, some private gentlemen and ladies pay subscriptions, and the profit of farming is supposed to cover the rest of the expenses.

This is in Europe quite a new departure in the education of the deaf. It is to be hoped that it may prove successful. The energy and perseverance of Mr. Boyesen is the best guarantee of the ultimate success of the enterprise. As farmers or agricultural laborers the deaf will be less liable to "clannishness"; they will learn to converse more freely with hearing people; they will get a broader view of life; they will lead a healthier existence; and the number will be fewer who are lost in the slums of the great cities.

TEACHERS AND PHYSICIANS.

G. FERRERI, SIENA, ITALY.

The revival of the studies of pedagogy and physiological-psychology demonstrates—especially during the last twenty years—the intimate connection between organic and psychic activity, and the reciprocal action of the one upon the other. From this a new literature has arisen upon the mutual relations between the physical and the intellectual and moral development of the child. The modern educator can find his way today in the complicated labyrinth of sensorial impressions and psychic activity of his pupil, if only he follows with vigilant care and intelligent interest the literature which has had its principal development in France and Germany. This advantage, theoretically at least, has been felt by students of medical science who are agreed in admitting that the education of the young must be based upon the imperious needs of hygiene and of a normal physical development of the child.

One might observe that certain truths were also not hidden from the ancients, although forgotten or neglected during the course of centuries which with their vicissitudes arrest humanity or carry it backward on its march towards civilization and progress. It is well to remember that while the Latin poet limited himself to only expressing a desire, with his "*precamur ut sit mens sana in corpore sano*," the modern man has transformed prayer into action and does not hesitate to admonish, "let us see to it that the good organic constitution of the child favors the efficacious action of the mind in its gradual development."

It would be easy to display one's erudition by describing here the phases of evolution undergone by physical education from the time of Descartes until our day, but instead we must hasten to enter into the argument which is the object of the present article.

The relation between teachers and physicians has been rendered more intimate and reciprocal from the moment that education could be defined as a function which favors and facilitates the natural work of evolution; the work of nature is strengthened when joined to that of man. But it is also true that, with a few exceptions made for the most advanced nations, the questions of scholastic hygiene, from that of the *school-buildings* to that of the *overwork of the brain*, still remain a matter of theoretic and speculative discussion. Now although one explains this in a measure by the actual conditions and by the difficulty of many experiments through which must result, sooner or later, a practical change in the science of education, it cannot be justified in regard to the pedagogical treatment of abnormal children. For this the harmonious cooperation of physicians and teachers ought to have constituted the basis for an emendatory pedagogy (*Heilpädagogik*).

We are, alas, instead only at the first stage of the problem, and although for nearly twenty years teachers and doctors have been trying to agree upon a more rational educative work for children defective in body and mind, still this agreement is far from being accomplished as yet. The causes for this phenomenon are many and various, but if we limit ourselves to the principal ones alone we hope to bring a useful contribution towards the solution of this important problem.

We must naturally limit ourselves to the necessary cooperation of physicians and teachers in the modern school for the deaf. For this purpose it is well to call to mind two of the most recent publications which reflect in a measure the state of the question in Europe.

The first is that of Mr. Karl Baldrian, an experienced teacher of Döbling (Vienna), *on the cooperation of physicians in the education of the Deaf*¹; the other we owe to the pen of Dr. Eloy Benjarano, of the Institute of Madrid.² While the first gives us an idea of the need felt in countries of the German tongue for an efficacious contribution on the part of physicians for the social restoration of the deaf; the second shows in part the reasons

¹ "Die Mitwirkung der Aerzte bei der Taubstummenebildung."

² See department of Reviews.

why this contribution is wanting in the Latin countries of old Europe.

A glance at these two writings will result, we hope, in showing us the condition of one of the most interesting questions now in discussion in regard to the modern school for the deaf.

Mr. Baldrian begins by observing that if in any branch of education the harmonious work of medicine and science is necessary, it is in that of the education of the deaf.

It is true, he says, that a consulting physician is not lacking in any institution for the deaf for cases of illness among the pupils, but it is also true that his work is very limited. One must consider, in fact, that it is not enough, in respect to the deaf, a general care such as every ordinary physician takes for hygienic conditions of the rooms used as schoolrooms, for recreation, etc. Every one knows that a great number of our pupils are found in a miserable physical condition, and require special care on the part of the physician and teacher. This reminds me of a curious visit which I made some time ago to a school for deaf girls. There were about a dozen pupils. In all of them I noticed a physical and moral prostration, to which I soon was obliged to attribute the weariness and general apathy of the class, weariness and apathy which were reflected mutually from the pupils to the teacher and from her to them. I began to make a more particular examination of the different pupils, and in reply to my questions I received such a mournful litany of answers as to make me think I was in a hospital rather than in a school. One was affected with myopia; another who looked like a bagfull of matter, was under treatment for glandular scrofula; a third was enduring with the patience of Job the repulses of her schoolmates, because she was affected by ozena; a fourth was frequently seized with such crazy fits as to give cause for serious apprehension; a fifth had lost her left eye; a sixth, one does not know *why* said the teachers, was entirely refractory to reproof or to emulation—*she would not learn*..... But I will not extend the sad list of the conditions of that unfortunate class. It seems to me that I have said enough: 1, to call to mind the fact that defective results do not always depend upon the imperfections of the method; 2, to confirm, and that

any one can do who has had any real practice with the deaf, that which the colleague Baldrian so opportunely reminds us of, when he insists upon the necessity of a sanitary, accurate, and thorough examination of all the children who are admitted to a school for the deaf.

The information which the parents of the deaf child can give in this respect is not sufficient. They themselves do not know whether their child is affected with other bodily infirmities besides that of deaf-mutism. Sometimes also, and this I have proved in preceding writings of mine, the parents will not tell all for fear of having the unfortunate child sent home.

An accurate examination should also be made by the physician, accompanied by the Principal and the class-teacher, of the lungs of the new pupils, and in case of general weakness, and particularly of the organs of respiration, the oral teaching should be postponed until the individual has been well fortified by a special treatment. For this end there ought to be connected with the ordinary course of instruction, a school of observation and of preparation, like the one already established by Mr. Stötzner, the Principal of the Institute of Dresden. The institution of the kindergarten which I saw in various places in the United States answers perfectly to this need, where the child is prepared for school with special care of mind and body.

In cases where there is reason to fear a disposition towards tuberculosis, an examination must not be neglected, in order to protect the patient as well as his fellows from danger.

In the second place is taken into consideration the work of the aurist, who alone is able to recognize the auricular conditions of the deaf pupil. The visit of the specialist to our pupils is not only of use to the educator in giving them knowledge of the defects and of the injuries of each organ of hearing, (perforation of the drum, suppuration, defective development, etc.), but he can also indicate what treatment is necessary and suitable for the good of the pupils. Besides this, it is well known that often the extraction of foreign substances may discover the existence of a power of hearing, at least for vowels. It may also be advisable in some cases to have an operation, for which, however, the consent of the parents should always be obtained.

The systematic acoustic exercises must be taken by the advice of the physician subordinated to that of the educator, and must be directed and carried on by the teachers.

But the investigations of the specialist should not be limited to the organs of hearing, which are dead in the majority of cases, and for which there can be no hope of success in any rational treatment. One must extend the examination therefore in order to ascertain the physiological and pathological conditions of the mouth, nose, and the pharyngeal cavity, for it is known that certain maladies, as for example the adenoid vegetation, have an injurious effect not only in a physiological respect, but also in that of the psychological development of our pupils.

Let us hear what Dr. Gutzmann has to say in regard to this in his valuable study on "*the development of speech and its impediment in the child*":

"Among the preventive causes which not rarely produce mutism without deafness, belongs in a special manner the adenoid vegetation in the naso-pharyngeal cavity. The lymphatic vessels of the throat are in close and reciprocal connection with the base of the brain, especially in children, and one must admit that with the adenoid vegetation is connected a species of lymphatic stasis. Many observers of authority, and the same has also happened to me, have seen (after the removal of the adenoid vegetation) speech develop spontaneously in a most wonderful manner in children of 5 and 6 years of age, which had been prevented until then. And we find that 53 per cent. of the mute children without deafness are affected with adenoid vegetation."

There are besides many and various reasons why the assistance of a physician in the diagnosis of deaf-mutism and in the prognosis and treatment of our pupils, is becoming every day more necessary. The artificial development of speech not only requires the intelligent work of the teacher, but also the guidance of the specialist-physician, who alone can discover the defects so frequent in all the parts of the vocal organs, and can suggest the most efficacious remedies.

But, unfortunately, the necessity of the assistance of a specialist-physician in our educational work makes us consider and demand "if such physicians, competent in the matter, exist?" and

“if and how they are admitted among the personnel of the school?”

At this point an opportunity is offered us of entering into a discussion from which would result:

1. That the ordinary sanitary personnel is not only unable to cooperate intelligently with educators for the lack of psychological study in respect to the mental development of abnormal children; but also only in a limited way in respect to the physical treatment.

2. That the assistance of a specialist-physician has not been considered necessary until now because of the distrust which educators had, and still have, of them.

3. That this distrust has been strengthened and increased by the physicians usually employed by the Institute of the Deaf, for as they have not studied otology, rynology, nor laringology, they did not have a clear idea of these sciences and often depreciated the results.

4. That these results have been often compromised by the same specialists from having promised too much, and also sometimes from having operated too much, giving in their practice too great a part to surgery, when all that was needed was a simple and easy therapeutics.

5. That in the few and rare cases where a specialist-physician has been added to the personnel of a school, his work has remained inferior to the need, and this from lack of preparation and of energy on his part, or because he did not find the necessary cooperation on the part of the Principal and teachers.

I have condensed in the preceding points a long discourse, which I could also illustrate with a quantity of facts. I prefer, however, to refer to the two authors already mentioned, and verify by means of them the present state of the question.

Mr. Baldrian extols the provision made by the Prussian government in 1900, as a very wise one, which relates to special courses to be given every year for the special instruction of the physicians employed by the Institutes for the Deaf. These courses have already taken place in Berlin and Munich, and have been largely attended by physicians and teachers from the various provinces of German speaking countries.

On these occasions the attention of doctors and teachers was directed to the necessity of a special treatment for the eyes and teeth of the deaf pupils. As regards the eyes it would be superfluous to insist upon their importance and value for one deprived of hearing; as regards the teeth, it is only too well known how often they are irregular and of defective development in the deaf.

The provision of the German government relieves us from the necessity of speaking of the need and importance of giving special instruction to the physicians employed in our schools. But, however, it offers us an opportunity of verifying that the lack of suitable knowledge in the ordinary physician, is owing to the noted fact that in our universities there is seldom found a chair for the teaching of otology, and kindred sciences, and that where such instruction is given, it is never placed among the regular branches, but it is left to the option of the student to inscribe it as one of the special courses. Hence it follows that only those study it who wish to become specialists. This is a serious defect, as I have already at other times had occasion to prove, and when one reflects that although the course of ophthalmology is required, yet, as is reasonable, those with diseases of the eye, for an efficacious treatment, go to an oculist and not to an ordinary doctor.

It was this state of affairs which caused the passing of the resolutions by the National and International Congresses of the various otological societies established during the past twenty years. But as yet these resolutions remain in the region of rosy ideals, and they have again been sadly repeated in the XIV. Congress of Medicine, held the present year in Madrid.

On that occasion Dr. Bejarano treated the subject of the medical-pedagogical treatment of the deaf, but was obliged to connect it with the general deficiency in the preparation of physicians, and in the lack of specialists. And we could confirm with facts observed during more than 12 years, that which Dr. Bejarano had to say in regard to the wretched answers given by the physicians to the questionnaire in common use in some of the Institutes, for the admission of pupils.

It had been hoped, and such a hope seemed reasonable, that

in process of time when these questionnaires should be extended to all the schools (as is the case in Norway and Denmark), a collection could be made of them which would bring a valuable contribution to Etiology and to Pathogenesis and to the diagnosis of deaf-mutism. And that from this benefit of a real importance, would certainly be derived a rational guidance for distinguishing the difference between medical and pedagogical treatment, and in consequence there would result progress both in the science of medicine and in that of education.

But if all this is lacking as yet, it does not mean that we have renounced hope for the future. An intelligent cooperation between physicians and teachers must prepare the ground best adapted for comparative research on causes, and effects, and the medical-pedagogical remedies for deaf-mutism.

In order to obtain this—rather than by the resolutions of Congresses, or by the direct intervention of governments, busily occupied in quite other affairs—one should trust to a harmonious understanding between teachers and physicians. They must both persuade themselves that if the Pathology of deaf-mutism is as yet almost unknown, it is owing to the hurtful and traditional exclusion of the physician in the many and various maladies of infancy.

As regards then the treatment and education of the deaf, in the present state of science in general and of physiological-psychology in particular, it is not allowed to separate the work of the physician from that of the teacher.

One must remember, however, that to obtain such an union it will be necessary first of all for both parties to avoid every tendency to overrule each the other. It might be proved, in fact, that it was due in a great measure to this tendency in the mutual relations between the physician and teacher, which has retarded until now this most desired cooperation for the benefit of the deaf.

THE RELATIVE VALUE OF SPEECH AND LIP-READING.¹

A. FARRAR, JR., LEEDS, ENGLAND.

Let me at the outset explain that by the above title I mean the value of speech and lip-reading compared with each other and not with other forms of expression. I do not, however, propose to discuss the question from the pedagogical point of view, for to do so would re-open the floodgates of controversy in regard to methods of instruction. Nor do I propose to discuss it with reference to the social results of oral education—an equally wide and debatable subject. I intend rather to limit myself to the experience of the oral deaf and take as an accepted fact their ability to speak and read the lips with varying degrees of success in their every day life, and to consider which of the two accomplishments is of the most value and advantage to them. My paper is addressed chiefly to oral teachers, or perhaps I should rather say all who instruct their pupils in speech and lip-reading, whatever may be the precise method followed in their general education.

Speech and lip-reading are so constantly associated together as if the one were the indispensable complement of the other, like the ear and speech with those who hear, that the idea of there being any difference in their practical value will to some appear strange. What, they will say, is the good of speech, if at the same time you cannot read it on the lips of another, or what is the good of lip-reading if you cannot speak well enough to be understood? No doubt in theory the oral deaf who can speak fairly well should be able to read the lips equally well, or *vice-versa*, so that a proper conversational balance is maintained between them and their interlocutors. In practice, however, such is rarely the case. The speech of the deaf may be understood by a considerable number of people, but it does not necessarily follow that the former on their part are able to read the lips of all the latter.

¹ Reprinted, with the author's permission, from *The Teacher of the Deaf*.

The fact that speech and lip-reading are not of equal value in the intercourse of life is one that has long been familiar to me both from personal experience and from observation of other oral deaf people, and it is at the present time the subject of inquiry in America.

I believe the experience of the oral deaf in regard to speech and lip-reading may be classed under one or other of the following heads:—

1. Their speech may be so good and intelligible and their capacity for lip-reading so highly developed that the two balance each other and work in unison in conversation. They are then of equal value. This is the highest ideal that can be aimed at and realized in practice, implying a degree of facility in mutual oral intercourse between the oral deaf and their hearing interlocutors that falls little short of that between hearing people.

2. Their speech may be good and intelligible, but their capacity for lip-reading relatively limited and its value dependent on special conditions of intercourse, possibly involving the assistance of other modes of expression, such as writing and manual spelling.

3. Their speech may be poor and not always intelligible, but their capacity for lip-reading may be relatively high.

4. Their speech and lip-reading may both be so poor as to be of little or no social value, at any rate beyond a very limited circle.

The condition described in the first of these classes is more or less ideal, and I believe is seldom fully realized in actual practice, and then usually only in certain circumstances, as between teacher and pupil at school, and in the intimate intercourse of family, social or business circles where the oral deaf attaining to this standard are well known and accustomed to move.

Leaving the fourth class out of consideration as of no great account, I believe the experiences of most of the oral deaf who are fairly successful would be found to fall under the second and third classes, but chiefly under the second.

It has been and continues to be my good fortune to enjoy in exceptional cases an experience of the first class, but so far as intercourse at large is concerned and even with many intimates,

my experience for the most part has been of the second class. I may illustrate this by one or two concrete instances. During the final stages of preparation for the London University Matriculation I had two special tutors, or "coaches," one for the classical and the other for the scientific side—men who had no previous knowledge of the deaf. My experience of the former was of the first class, so much so indeed that it would have been difficult to find another man whom it was so easy and pleasant to lip-read. The latter—the scientific tutor—although he understood me nearly as well as the other, was, on the contrary, very difficult to lip-read, and consequently conversation on his side was for the most part by writing—an experience of the second class. I say this in no disparagement of the gentleman.

Again, to take another instance of recent date, at one of the conferences of the N. A. T. D., I met, not by any means for the first time, a man now dead, who was well known and highly esteemed the whole world over by all concerned with the deaf. He had little difficulty in understanding *my* speech, but *his* mode of speech made it all but impossible for me to read his lips properly, and so he partly spelt on his fingers. Directly I had done with him, I was conversing with another gentleman whom I had seen only once or twice before, and the experience was altogether of the first class. The incident was not without its ludicrous aspect, as the former was known for a sceptic in regard to lip-reading and the other a firm believer in it. It proved the need of caution on the part of hearing people in giving testimony of their experiences with the oral deaf, and supplied a possible clue to the conflicting character of the views and evidence we are accustomed to have on the subject. The above instances are simply a few out of many, and typical of much of my intercourse through life.

In regard to lip-reading it is difficult to say precisely why in such cases as these the one succeeded and the other failed in similar circumstances. The chief cause, however, lies in the different modes in which people speak, which in their visual effects are more varied than those who hear have any conception of, but other causes, chiefly dependent on constitution and temperament, play an important part in determining the particular

expression which speech takes in each individual. Contrary to what might be expected, the most highly educated, probably from their more studious and secluded habits, are not necessarily the most likely subjects for successful lip-reading. They are rather to be found amongst ordinary people of active and smart habits, and preferably the young.

Similarly in regard to speech, some people understand me quite readily even for the first time, while others fail to do so after repeated trials. In this case it is still more difficult to give any satisfactory reason for such marked differences. Possibly it may be due to the possession or want of an "ear" for the peculiar and unusual intonation of the oral deaf. The difficulties connected with the practice of speech, however, are nothing so great as those connected with lip-reading.

But to return to the point, if the question be put whether speech or lip-reading is of the most value under *all* circumstances, I most unhesitatingly give the preference to the former. This may be further illustrated in a more general way. Suppose an oral deaf person is brought into contact with, say, fifty different persons, including strangers and friends; if his speech is fairly good and intelligible, the probability is that most, if not all, of these fifty will understand him readily enough. On the other hand, each of these fifty will exhibit differences, sometimes considerable, in his or her mode of speech, and consequently our deaf person's capacity for lip-reading will not be equal to understanding as many of his hearing interlocutors as understand him. He will readily understand a certain number, others with more or less difficulty, and some not at all. Thus it may well happen that while an oral deaf person may be fairly well understood by a number of people, his means of understanding them, on the other hand, may range from perfect lip-reading with a few of them to utter inability to read the lips of others. It is this difference in the "personal equation," if I may call it so, which renders speech a comparatively certain and lip-reading a comparatively uncertain means of communication.

A practical consequence of the greater value of speech as compared with lip-reading may also be seen in the following not uncommon case of a more individual sort. Suppose an oral deaf

person casually meets a stranger with whom it is necessary to communicate; then if his speech is fairly intelligible he can not only make himself understood, but what is of importance, can explain his own situation and place his interlocutor in a position to communicate either by lip-reading, writing, or manual spelling, as the experience of the moment may determine to be most convenient for both. On the other hand, if the deaf person is unable to make his speech understood it is easily evident that he cannot make any progress at all by that means alone, so that even if he happens to possess a high capacity for lip-reading, this will not help matters much in his intercourse with the stranger.

In this connection I may mention a circumstance which is another point in favour of my view of the relative value of speech and lip-reading. It is that hearing people as a rule prefer to hear the deaf speak, if they do so fairly well and intelligibly, rather than follow their finger spelling or read their writing. On the other hand, if these same deaf persons do not read the lips of hearing people very readily, the latter are not so disinclined either to spell on the fingers or write, if it facilitates conversation.

Again, on the many occasions in daily life when the oral deaf are in shops, offices, hotels, railways, and such like circumstances, it is clear and intelligible speech that is found to be really indispensable, and usually suffices without any great call being made on their capacity for lip-reading. We may indeed go so far as to say that the speech of the oral deaf is the essential and valuable element in their intercourse, while it is more rarely that lip-reading alone is available without the aid of writing and manual spelling.

There is still another factor which tells largely in favour of speech being of more value than lip-reading. It is that if the deaf speaker's speech is intelligible it is directly available and strikes home at once, whereas with lip-reading the hearing speaker has to address himself specially to his deaf interlocutor and speak slowly and distinctly. This is seen in the fact that the ordinary conversation of other people amongst themselves is seldom if at all followed by the oral deaf.

In general, lip-reading is of the most value in the school and home, while speech is of the most value in life at large. In

the school it is necessary for a number of the deaf to follow the lips of one hearing person—the teacher—while in ordinary life one deaf person has to make himself understood by as many hearing individuals as he meets.

I am, however, very far from wishing to appear to depreciate the value of lip-reading by placing it on a lower level than speech. Whenever conditions of intercourse of the first class, or even of the third, are possible, lip-reading is simply invaluable, but under other conditions it depends very much on the nature of the personal equation how far it will go, and quite as often as not it has to be supplemented by writing and manual-spelling. This is sometimes regarded as though it were a confession of failure. Argument is not possible with critics who insist on finding in lip-reading a perfect substitute for hearing or not at all, and judge accordingly. I would, however, remark that the value of a means of communication like lip-reading, which is not always equal to the demands made on it, cannot be fairly judged by isolated instances of success or failure in the same individual, but must be estimated by the gain or loss in his general experience.

Erroneous ideas are held by many as to the true relation of speech and lip-reading to each other, some even regarding the latter as the backbone of the oral method, strangely oblivious of the fact that lip-reading derives whatever natural validity it possesses from speech. You may teach a deaf-mute to speak only and not practise lip-reading at all, but you cannot teach him lip-reading only without speech. Cases may no doubt occur of deaf-mutes, who, although they have not learned to speak, at any rate to some purpose, nevertheless can read the lips with fair success, but they are exceptional. Lip-reading, divorced from speech, is simply a set of arbitrary signs, for then it has not the natural reality or intuitive value due to the deaf speaker's consciousness that the facial signs he reads are the necessary effects of the organic movements of speech which he has already learned to produce in himself, and which he associates with the facial signs.

So far as the question concerns the oral teacher, while he should aim at developing and employing lip-reading to the ut-

most, it is of still greater importance that he should secure a free and intelligible articulation in his pupils. This is after all the real test. Excellence in speech depends largely on the teacher's ability, but lip-reading depends more on the scholar's own ability—I might add knack—a fact remarked long ago by Bonet in his classical work. We cannot hope in all cases to secure the condition of things described in the first class of experiences, but much, very much, will be gained if the speech of the deaf is good and intelligible, and it may then be left to their hearing fellows to employ lip-reading, writing or manual spelling according to the capacity of the deaf to follow each individual by one or more of these means.

REPORT OF COMMITTEE ON STATISTICS OF
DEFECTIVE SIGHT AND HEARING OF
PUBLIC SCHOOL CHILDREN.¹

BOSTON, MASS., July 10, 1903.

To the President of the Department of Special Education of the
National Educational Association.

Dear Sir: Your Committee has experienced considerable difficulty in collecting statistics concerning the number and percentage of pupils in public schools who have defective sight or hearing, retarding their progress in school.

Through the courtesy of the Hon. William T. Harris, a special circular of inquiry was sent out by the United States Bureau of Education to the superintendents of schools in cities having more than 25,000 inhabitants.

The circular was sent to 160 city superintendents, 78 answers were received, and only in 19 cases were any statistics reported. Unfortunately there were only about half a dozen cases in which the figures were so arranged as to be capable of combination into a table.

From the returns received by the Bureau of Education your Committee has compiled the statistics shown in the Appendix. Table I relates to defective vision: Total pupils examined, 34,426; defective in sight, 4,603 or 13.4 per cent. Table II relates to defective hearing: Total pupils examined, 57,072; defective in hearing, 2,067, or 3.6 per cent. In these tables minor defects have been ignored and only marked cases included.

These results indicate that large numbers of children in the public schools are handicapped in their progress through school by defective sight or hearing; and they suggest the importance of urging upon all superintendents of schools the advisability of testing the powers of sight and hearing possessed by their pupils, and of publishing the results.

¹Submitted to the Department of Special Education of the National Educational Association, at the Boston Meeting, July 10, 1903.

Your Committee suggests that the Department of Special Education should appoint a Committee to examine and report upon the various means employed to test sight and hearing in the public schools and to collect comparative statistics concerning the results.

Your Committee desires to express its great indebtedness to the United States Bureau of Education for so readily co-operating with them in its labors, and would suggest the propriety of asking the Bureau of Education to continue the collection of statistics of this character.

Respectfully submitted,

F. W. BOOTH, Chairman,
per A. G. B.

APPENDIX.

TABLE I.

City.	Pupils examined.	Pupils having marked defective vision.		Remarks.
		Number.	Per cent.	
Bayonne, N. J.	4,610	353	7.7	Note 1.
Jersey City, N. J.	1,100	197	17.9	Note 2.
Pawtucket, R. I.	4,663	517	11.1	Note 3.
Utica, N. Y. (1897)	6,113	667	10.9	Note 4.
Utica, N. Y. (1898)	5,987	588	9.8	Note 5.
Worcester, Mass.	11,953	2,281	19.1	Note 6.
Total	34,426	4,603	13.4	

TABLE II.

City.	Pupils examined.	Pupils having marked defective hearing.		Remarks.
		Number.	Per cent.	
Bayonne, N. J.	4,610	115	2.5	Note 1.
Chicago, Ill.	6,729	437	6.5	Note 7.
Cleveland, Ohio.	17,017	342	2.0	Note 8.
Pawtucket, R. I.	4,663	200	4.3	Note 3.
Utica, N. Y. (1897)	6,113	406	6.6	Note 4.
Utica, N. Y. (1898)	5,987	254	4.2	Note 5.
Worcester, Mass.	11,953	313	2.6	Note 6.
Total	57,072	2,067	3.6	

NOTES.

1. *Bayonne, N. J.*—Superintendent Christie reported 4,610 pupils examined; total number defective, 618; number with defective eyesight, 353; defective hearing, 115; other physical defects, 175.

2. *Jersey City, N. J.*—Superintendent Snyder submitted a report by Dr. Wallace Pyle, oculist, concerning the results of the eye examinations of the children of the grammar departments of public schools Nos. 1, 2, 15, 20, and 22.

Number of pupils examined 1,100 (girls, 542; boys, 558). Ages ranged from 9 to 16 years.

Cases of astigmatism, 116 (girls, 56; boys, 60); defective distant vision, 251 (girls, 119; boys, 132); defective near vision, 33 (girls, 15; boys, 18); number wearing glasses, 23 (girls, 14; boys, 9); cases of cross-eye, 19 (girls, 11; boys, 8); inflammation of eyes, 51 (girls, 23; boys, 28); trachoma, 13 (girls, 4; boys, 9).

Number of cases having marked defective vision, and whose parents were notified of the existing defect, 197 (girls, 99; boys, 98).

3. *Pawtucket, R. I.*—Superintendent Hervey reported that during school year 1900-1901 the teachers tested 4,663 children and found 517 children who had one-half or less than one-half of normal vision in one or both eyes, and that 200 had marked defects in hearing; also that a large number of children had adenoid growths.

4. *Utica, N. Y.*—Extract from 1897 report of Superintendent Griffith:

During the spring of 1896 tests were made of the sight and hearing of all the children in the public schools. These tests were made by the teachers after instruction by a specialist. Snellen's test cards were used for testing the sight, and an ordinary watch for testing the hearing. A summary of the conditions revealed by the test is as follows:

Whole number examined.....	6,113
20-60 or lower.....	667
20-10 or higher.....	23
20-40	890
20-40 to 20-60.....	48
Astigmatism	1,187
Astigmatism combined with headache.....	562
Color-blindness (nearly all to red).....	134
In the ear test, those who could hear less than one-third the average distance for the class.....	406
Those one-half to one-third this distance.....	399

Counting both tests, there were 1,202 different pupils extremely defective, and 965 others who seemed to be quite defective, enough so to need examination by a specialist. Thus we found about 35 per cent. defective in sight or hearing or both. This condition, while not differing much from results reported from other places, demanded prompt attention.

The school authorities immediately did two things looking toward a remedy or amelioration of this serious condition. First, all pupils who were nearsighted or hard of hearing were given the seats in school most favorable for seeing and hearing, and all pupils were given special instruction with regard to care and use of eyes and ears. Secondly, notices were sent or given to parents of all children found to be thus defective, calling their attention to what it was believed had been discovered, and advising that a physician or oculist be consulted at once.

Our tests revealed many sad and critical cases, which were remediable because discovered at this stage of development. Many parents could not strongly enough express their gratitude to the teachers. Many children consulted specialists and were successfully treated. Cases of what had been considered dullness or willful inattention on the part of pupils were shown to have been due to inability to see or hear.

5. *Utica, N. Y.*—Extract from 1898 report of Superintendent Griffith:

SECOND TEST OF EYES AND EARS OF PUPILS.

During the spring of 1896, all the pupils in the public schools were tested by the teachers for defects in sight and hearing. The results of that test were published in the annual report for 1897. This fall a similar test has been made of all pupils above the first grade. The following table, taken from advanced reports, condenses the main results shown. Further study of the records will doubtless reveal other features worthy of careful attention.

Whole number examined.....	5,987
20-60 or lower.....	588
20-10 or higher.....	9
20-40	833
20-40 to 20-60.....	45
Frequent headache.....	587
Color blindness	32
Number somewhat defective.....	1,038
Per cent.....	17
Number seriously defective.....	778
Per cent.....	13
Total defectives.....	1,816
Per cent.....	30

In the ear test those who could hear less than one-third the average distance for the class, 254.

Those one-half to one-third this distance, 276.

By the test of 1896 there were found 2,167 pupils, 35 per cent., defective. The difference in the percentage of defectives is not great, and may be accounted for by improved conditions, by a more frequent use of glasses by the pupils, by better care of the eyes and ears, by the difference in the grades tested, or by the margin of errors incident to such work when not done by trained experts. This much, however, is evident—there are far too many children trying to do school work handicapped by imperfect vision or hearing.

Notices, setting forth what the tests discovered, have been sent to all parents whose children were found defective in either sight or hearing. Attention will be given in the schools to see that such children are given the most favorable seats. Other uses to be made of the results of the tests are yet to be decided upon.

It is distinctly asserted that we do not claim for these tests the accuracy of a specialist. The teachers were all instructed how to take them, and they did the work with such care and skill as was possible to them. It is confidently believed that the tests were sufficiently accurate for all the uses we have made of them or purpose to make of them.

Thanks are due to the teachers who have, at considerable expense of time and strength, performed this extra work for what is believed to be the children's good.

6. *Worcester, Mass.*—Extracts from “Report of the Tests of the Vision and Hearing of the School Children of Worcester,” by G. E. Partridge.

The report includes returns from all the school buildings in the city, with the exception of two, having a total of 493 children. * * * Deducting these cases from the total population of the grades (II to IX) leaves 11,953 pupils. Of these 2,281, or 19 per cent. of the number examined, were found to have defective eyesight.

TABLE I.—*Number of cases of defective eyesight in each grade.*

Grade.	Boys.			Girls.		
	Number examined	Number defective.	Per cent.	Number examined.	Number defective.	Per cent.
IX.....	376	44	11.7	417	84	20.1
VIII...	541	81	14.9	533	138	25.8
VII....	583	84	14.4	609	145	23.8
VI.....	783	123	15.7	772	152	19.6
V.....	883	131	14.8	804	181	22.5
IV.....	888	192	21.6	817	249	30.4
III.....	1,017	168	16.5	880	188	21.3
II.....	1,068	159	14.8	982	162	16.4
Total..	6,139	982	15.9	5,814	1,299	22.3

TESTS OF HEARING.

Hearing was tested with the conversational tone. One hundred and seventy boys and 143 girls (2.9 and 2.3 per cent., respectively, of all the pupils examined) were reported as defective. These numbers include also a few reported for discharge from the ear whose hearing was normal. These numbers compared with the results of tests of the hearing among school children in other cities, made by expert examiners, is unusually small. The tests for hearing are difficult to apply uniformly, and it is highly probable that the first rough examination has failed to reveal the true condition. Deafness varies very much from day to day, and even during the same day in the same individual. The time of year in which the examination was made was also very favorable. It is possible that two or more examinations of the same individual and the application of more than one of the simple tests would have given different results. (Other tests beside voice tests have been used with varying degrees of success. Among these are the watch tests, the Politzer's acoumeter, and an instrument lately devised by Dr. Seashore, which is said to have given satisfaction in the school tests in Chicago. This instrument is simple in operation, and it affords a uniform method, and thus eliminates for the most part personal equations of untrained examiners. The chief objection to it is its cost, but possibly one instrument could be made to do service for all the schools of a city.)

Snellen's test types were used in testing sight, and the following quotation from “Instructions for examinations” shows the method employed in testing the hearing:

"To examine for defective hearing, test each ear separately. Have pupil stand 20 feet distant, facing squarely to right or left, not allowing eyes to be turned toward examiner; have pupil gently press a soft handkerchief to the ear turned away from examiner, and then whisper, slowly and distinctly, or pronounce in an ordinary conversational voice, words or numbers, requiring the pupil to repeat them as soon as heard. If the words are not heard at 20 feet, approach pupil until they are heard, and note the distance, and record in the blanks furnished for the purpose. If found defective, a card of information should be sent to parent or guardian."

7. *Chicago, Ill.*—"Some Results of Hearing Tests of Chicago School Children," by D. P. MacMillan, Ph. D. An address given at the Detroit meeting of the National Educational Association July 12, 1901, before Department XVI, now the Department of Special Education.

The tests were made with the use of the audiometer invented by Prof. C. E. Seashore, of the Iowa State University, and which is described in detail by him in Volume II of *Studies in Psychology*, issued from that university. * * *

The apparatus consists of an induction coil, a battery, a galvanometer, a resistance coil, switches, and a telephone receiver, all done up in a convenient and portable hand box. By turning a switch the dry battery can be thrown into the primary circuit of the induction coil. Another switch turns the galvanometer into the circuit. Then by varying the resistance by means of plugs the fall of potential over the primary coil can be made constant, as indicated by the galvanometer. The primary circuit can be opened and closed rapidly by means of a key, and, as no stimulus can be produced save when the current is closed, the making and breaking of the current makes sharp clicks, which serve as a stimulus whose intensity can be varied at will by means of the secondary coil. This secondary coil is wound in forty sections, arranged in a series on the basis of the number of turns of wire that each contains. Each of these sections is connected with the surface terminals in such a way that the number of sections indicated on the scale can be thrown into the circuit by a spring contact, and by moving the carriage along the scale to the proper terminal one can vary the energy communicated to the receiver in this circuit. * * *

The test was made in the following manner: As the pupil entered the quiet room he was seated at one end of a table, at the other end of which the operator sat. With the receiver at one ear and the other ear closed to exclude possible disturbances, by slightly pressing the tragus of the ear backward the pupil awaited the signal for the test to begin. At first the register was set at such a part of the scale that a distinct clicking sound could be heard. The sound was then made to decrease in intensity until the point was reached where it could no longer be sensed. * * *

The experiment was further checked by proceeding in the opposite direction, i. e., from below the threshold of hearing to a point where the sound was distinctly sensed. The results secured in these two ways were averaged and the pupil's record obtained. * * *

A pupil is classed as "defective" when it is found from his audiometer record that he would be seriously inconvenienced in detecting sounds of medium intensity, i. e., four or more points below the norm.

TABLE I.—*School life and hearing.*

Age.	Pupils tested.	Defective in one or both ears.		Defective in both ears.		Defective in right or left ear.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
6.....	341	52	15.2	22	6.45	30	8.79
7.....	473	76	16.0	32	6.97	44	9.30
8.....	545	123	22.56	47	8.62	76	13.94
9.....	555	96	17.29	39	7.02	57	10.27
10... ..	598	88	14.71	38	6.35	50	8.36
11.....	558	88	15.77	39	6.98	49	8.79
12.....	608	86	14.13	31	5.09	55	9.04
13.....	599	82	13.69	35	5.94	47	7.75
14.....	664	103	15.51	38	5.72	65	9.79
15.....	664	108	16.26	39	5.87	69	10.39
16.....	555	84	15.13	40	7.20	44	7.93
17.....	377	56	14.85	29	7.69	27	7.16
18.....	192	38	14.59	8	4.16	30	10.43
Total..	6,729	1,080	16.05	437	6.64	643	9.55

In general, of the 6,729 school children between the ages of 6 and 18 tested for aural acuity 1,080 of this number—i. e., 16 per cent.—were found defective in hearing in one or both ears, and are liable to be at a great disadvantage unless the presence of such defects is known in each case. Again, $6\frac{3}{4}$ per cent. of the total number are found defective in both ears. Further, $9\frac{1}{2}$ per cent. of the total number of children have either the right or left ear defective, and need especially to be cared for and seated on the proper side of the teacher in order to be able to utilize the unimpaired ear to the best advantage.

8. *Cleveland, Ohio.*—Superintendent Moulton inclosed the report of the supervisor of hygiene and physical education for the year 1901-2, together with the same data for 1900-1901. (See following page.)

Important statistical items deduced from the examination of 39,043 cases in 1900-1901.

	Grade.								
	1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	Seven upper grades.
Total pupils by grades....	6,104	5,825	6,141	6,462	4,719	4,209	3,189	2,934	32,939
Total pupils with defects of special senses	686	955	1,143	1,198	918	862	603	490	6,169
Total pupils with defects of special senses, per cent	11.2	16.3	18.6	18.5	19.4	20.4	18.9	20.4	18.7
Total pupils wearing glasses at the beginning of the year ..	37	121	218	277	226	261	233	171	1,507
Total pupils who do not see well with their glasses	26	32	36	75	63	66	47	34	353
Total pupils marked 20-20 in one or both eyes	97	107	186	138	139	116	92	102	880
Total pupils marked 30-20 in one or both eyes	234	315	404	410	294	295	219	154	2,091
Total pupils marked 40-20 (or less) in one or both eyes ...	293	369	482	542	415	385	244	214	2,751
Total pupils marked 0 (blind) in one eye.....	52	61	26	44	44	26	24	34	259
Total pupils having a difference in vision of eyes	174	229	446	447	382	378	263	236	2,381
Total pupils who do not hear well	81	100	49	79	58	36	20	17	359

Report of teachers' examination of vision and hearing, 1901-2.

	Grade.								
	1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	Seven upper grades.
Total pupils by grades	5,004	6,609	6,405	6,600	5,454	4,099	3,360	2,775	34,802
Total pupils examined.....	4,609	5,827	3,098	2,485	1,944	1,524	1,392	765	17,017
Total pupils with defects of special senses	411	1,185	1,012	1,115	906	640	558	390	5,806
Total pupils with defects of special senses, per cent ...	8.2	17.9	15.8	16.8	16.6	15.6	16.6	17.3	16.6
Total pupils who do not appear to see well with their glasses.....	10	30	35	54	55	45	53	32	304
Total pupils wearing glasses at the time of examination .	41	127	163	259	200	202	178	147	1,276
Total pupils who appear to have crossed eyes.....	62	61	49	50	29	15	12	10	226
Total pupils who do not hear well according to Gale's test	72	85	50	60	56	32	35	24	342

REVIEWS.

American School at Hartford for the Deaf, the seventh Biennial (the 86th and 87th Annual) Report.

The Directors' Report refers to the fact that the annual expenditures exceed the receipts, and expresses the hope that the school may be the recipient of some of the bequests which are constantly being made to carry on great educational movements. During the year, the principal of the school, Dr. Job Williams, was obliged by the condition of his health to take a much needed rest, his place being filled by Dr. Gilbert O. Fay, one of the teachers of the school.

Dr. Fay as acting principal, presents his Report covering the year's work. The number of pupils present on April 1, 1903, was one hundred and seventy-two, with an average attendance for the two years preceding that date of one hundred and sixty-nine. Of the forty-five pupils withdrawn from the school in the two years, nineteen completed, or nearly so, the course of study, in an average school period of ten and a half years; while twenty-four—more than half—left prematurely, after an average schooling of four years and a half. The reasons assigned and evident for these latter withdrawals were failure of health, parental disinclination, demand at home for child labor, and indifference to study. Of the pupils of the school completing the regular course, Dr. Fay writes as follows:

"Our formal graduates, at the close of the academic term, in June of each year, honored themselves and the school by a series of literary exercises of their own composition, grammatical, thoughtful, and dignified. A majority had acquired a degree of oral speech and lip-reading that, in the home circle, and for the limited necessities of their chosen occupations, will be available and profitable. All of them write freely, if not with entire correctness, and read current newspapers, periodicals, and books understandingly and rapidly. Practical arithmetic, geography, and history, elementary physics, the care of one's health, the

laws of industry and business, the facts of human condition and character, the nature and obligations of civic and national life, the dignity and hope of religious living and worship, the responsibility of each individual for rational and useful activity, have passed through their minds in studious and thoughtful review. Their minds and hearts have been fortified and strengthened to encounter the peculiar difficulties of their condition, and to make for themselves a place in the world's affairs. Concentrated attention and manly exertion—their own personal contribution—will save them from falling below a fair grade of social respectability and usefulness. Our graduates of recent years have not failed to secure self-supporting and honorable employment, and are not being discharged for idleness or incapacity. Most of the boys have found occupation in the running of machinery where little social coöperation is required. With no spontaneous inclination to talk and limited to the alternatives of work or talk, they give unremitting attention to the former, a merit recognized by employers. Their school discipline and training, the arts of designs, and the handy use of tools, also taught, are seen to have borne immediate and substantial fruit, a situation in advance of the experience of previous years. The demand for deaf-mute mechanics is improving throughout the country.”

In a discussion of signs and their use, and of manual spelling and speech, Dr. Fay in the following paragraphs concludes with what we may conceive to be the general sentiment and practice of the school administration upon the subject:

“School exercises should not degenerate into pantomime merely or mainly. A steady mental diet of pictures, drawn or acted, but untranslated into words, like wordless sound, leaves the mind, as with the hearing, childishly feeble, though in raptures. Descriptive signs, however graphic, and a marvel to the curious, are the clumsy barter of savage life as compared with the coin currency of civilization. They add a charm to oratory, but need to be strung along a co-existing language-thread. Conventional signs, most decried, are less objectionable mentally, because comprehensive and concise. When pupils are able to speak a few words, and are perhaps adepts in finger spelling, we do not rigidly insist upon their using these only, in the friendly intimacies of life, and out of school hours, nor do we ignore their signs when ourselves addressed. As between sweeping signs, measured by yards and feet, finger-spelling, measured by finger-lengths and inches, and lip-reading, sometimes hardly perceptible to the naked eye, it is not difficult to

decide which the deaf will prefer, especially when at considerable distance, thirty feet or more. Upon serious and critical occasion we sign ourselves with no conscious stigma of ignorance, disgrace, or barbarism. But, granting the full vividness, accuracy, and ease of signing, it remains that its habitual use, however polished and perfect, tends only to dissociate the user from the hearing, outside of institution walls. In the days of Gallaudet and Clerc a matter of paid normal training, it is now left to the chance of voluntary interest. Signs may be nugget-wealth, but words are the universal coin of daily use.

“The manual alphabet, single-hand preferred, based wholly upon the spelling and order of the English sentence, is much less open to objection and constitutes a valuable stage of language-learning, ripening easily into correct composition. It consists of action, distinct, rapid, and easily executed, though small nor widely sweeping, and is addressed to a living sense, both of which are essential requisites of any language that is to be recognized and remembered. It can be readily used by supervisors and domestics, and by home-associates, in their intercourse with pupils. The eye of a deaf child grasps it easily, and his mind adopts it readily, as a concise medium of visual thought, and a rapid, exact instrument of expression. It leads the pupil up to, and never away from, the correct use of English, with but one step more, granted to be the most difficult of all, and requiring prolonged technical and expert drill, to oral speech itself. The possibilities of its use are illustrated in Helen Keller, possessing the sense of touch alone. It is everywhere convenient to the user, twice as rapid as writing, and nearly as rapid as speech. Its use is extending, because easily learned by the hearing, in families containing a deaf-mute, and because found to be useful, decidedly so, upon exceptional trying occasions, and in social emergencies, among the hearing themselves. At present, however, written words and oral speech, faulty to any degree, are the only forms of language generally acceptable to those with whom the deaf must live when away from school. One or both of these they must therefore acquire at any cost of pains and time. The slowness of finger-spelling as compared with signs, and disliked for that reason by the deaf, though forced upon their attention by the ubiquity of city lettering along our streets, and the inherent obscurity of speech to their keenest sight, and there is none keener, must by heroic practice and attention be overcome. Mental discipline, rapid thinking, the accumulation of knowledge, important as they are, are not the chief end of deaf-mute education. A limited amount of these may be profitably exchanged for added pro-

ficiency in language. The essence, the main purpose of deaf-mute education, more than in the public schools, is the gaining of ability to communicate promptly and correctly with hearing people by words written, at any rate, and spoken if possible."

Referring to Cogswell Hall, the new primary building occupied during the past two years, and the excellent conditions which it makes possible in the earlier stages of instruction, Dr. Fay says that "its partial isolation affords its teachers favorable opportunity for uninterrupted instruction and drill in speech and lip-reading, striving as far as possible to preoccupy the ground orally, to the exclusion of signs, in addition to the usual training in the elements of English composition."

The Teacher of the Deaf, Derby, England, May and July, 1903.

The governors of the Claremont Institution at Dublin have adopted a resolution asking state aid for schools for the deaf in Ireland, in accordance with the recommendation of the Royal Commission made in 1889. In commenting upon this, *The Teacher* says: "If Ireland is to be made fully prosperous, it cannot be allowed to lose the developed intelligence and skill of even its comparatively small number of deaf inhabitants, and therefore we trust that the education of that class will speedily be placed on a similar basis to that obtaining in England and Scotland, with a Parliamentary grant on a higher scale, more commensurate with the character and expense of the work." It was said, at the Claremont meeting, that the only other European government that does not aid in the instruction of the deaf is that of Turkey.

An especially interesting article in the May number is "Some Hints as to the Practical Training of Teachers of the Deaf," by Susanna E. Hull, one of the editors. Miss Hull argues, with much force and logic, that teachers of the deaf should possess the qualifications and training of educators in general before they enter upon the preparation for their special work. She summarizes her remarks with the following statement of what should be required in teachers of the deaf:

1. A good personal education, embracing specially,
 - (a) A thorough acquaintance with and free use of the mother-tongue, both in speech and composition.
 - (b) A sufficient knowledge of a foreign language to serve as an insight into the difficulties of acquiring a non-natural speech or language, and to serve as a basis for comparison of divergencies in modes

of expression and grammar, and to widen the future teacher's opportunities of studying methods followed in another country.

2. Actual certificated experience in the discipline and methods required for teaching ordinary children having full powers, and a thorough grounding in modern methods of "direct teaching" of language, and general subjects, apart from text books, *i. e.*, going direct to nature and the actual surroundings of the pupils for the subjects and illustrations of the instruction.

3. An insight into the special requirements of teachers of the deaf, arising out of the limitation of their pupils through loss of hearing, and how these needs are to be met.

4. If speech is to be the means of education, a thorough insight into Phonetics as a practical science, not a bare knowledge of the speech sounds.

5. A sufficient knowledge of Anatomy and Physiology to know how to deal with difficulties arising from abnormal physical troubles not peculiar to the condition of deafness.

6. A theoretical knowledge of the subject of education for the deaf, its history and development, with a practical acquaintance by observation of the *working* of various schools and institutions at home and abroad, *commencing* during training, but *continued* through the future life-work of the teacher as a means of keeping his own work lively and progressive.

7. Above all, a high and enthusiastic appreciation of his vocation, not only to be an educator, but as the restorer of the deaf to their rightful position as members of society.

"Suggestions on the Use of the Voice," by M. E. I. Kinsey, contains much of value to articulation teachers and to those who teach through speech. We hope at some future day to reprint the article in full.

Under the title "British Bibliography of the Education of the Deaf," A. Farrar, Jr., begins in the June number, the publication of a catalogue of books, pamphlets, and articles relating to the deaf and their education, published in England from the time of the Venerable Bede downward, a work that will be helpful to all who may wish to make a study of this class, and one for which Mr. Farrar possesses special qualifications.

The London School Board has opened at Anerley a residential institution for the instruction of the deaf in trades. Mr. A. Martin comments upon this experiment in an article, "Technical Training," in which he commends it, but claims it will be impossible for the majority of the schools, and especially so for the smaller and poorer ones, to provide adequate trade instruction, and he brings forward, as an alternative, the arrangement adopted at the Oldham School, by which pupils who have reached the age of fifteen are placed, for a part of the time, in a neighboring shop where they will be practically instructed in the trade for which they appear best fitted. These pupils are required to write out for their teachers an account of what they do each day in the shop, and thus they may be taught the names of their tools and the language for the processes

while, at the same time, the headmaster is able to discover whether they are being properly instructed.

These two numbers of *The Teacher* contain many other articles of merit, which go to show that the magazine is ably fulfilling its mission and that teachers of the deaf in Great Britain are enthusiastic, capable, and scholarly.

The Messenger, Belfast, July and August, September and October, 1903.

In the July-August number of *The Messenger* is an interesting history of Donaldson Hospital, and an account of the work it has done and is doing. This institution is peculiar in that it is the only one where the deaf, as a class, are boarded and instructed under the same roof and the same direction with hearing children. James Donaldson, of Edinburgh, who died in 1830, by his will left his whole property, amounting to £240,000, to build a hospital for boys and girls. While no mention was made of the deaf by the testator, the governors decided, on petition, to admit this class of children to the benefits of the Institution. The deaf are taught in separate classes, but out of school mingle with the hearing pupils. The writer says that, as a consequence of this association, former deaf pupils of the Hospital do not show much, if any, diffidence in mixing with the hearing public. Speech and the manual alphabet and signs are used with the deaf in the school-room and between the deaf and hearing children on the play-ground. Of the 226 pupils, 116 are deaf.

Another important contribution to this number is the account of the work being done for the deaf of India, written by Mr. J. N. Banerji. According to this there are 200,000 deaf in the country, of whom only 150 are being educated in the five special schools. These schools are located at Bombay, Calcutta, Palmacottah (South India), Mysore, and at Dhamtari, in Central India. The largest is at Calcutta, with 34 pupils.

The September-October number contains a brief report of the work of the National Association of Teachers of the Deaf, of Great Britain, held in London, July 7-10. Many papers were read and discussed by the leading men in the work. An unusual feature was a joint meeting of Conference with the Otological Society of the United Kingdom, at which was discussed, from both a medical and pedagogical standpoint, "The Method of Dealing with and Developing the Residual Hearing Power and Speech of the Deaf." There was also a meeting of matrons

of institutions, for the consideration of their special work. The Braidwood medal, for the best paper on "The Ideal Teacher of the Deaf," was won by Mr. Weaver, of Halifax, Nova Scotia.

"Deaf Graduates of American Universities" is an article by James W. Howson, himself a deaf graduate of the University of California. We give below his introductory and concluding remarks, and regret that space does not permit the reprinting also of the college history of the seven deaf men of whom he speaks. These are Henry Winter Syle, James W. Howson, Abraham Lincoln Fechheimer, Homer Charles Wheeler, Melvin Wheeler, Tilston Chickering, and Robert R. Pollak.

"A Deaf student both in his preliminary training for college and his education at the same is subjected to advantages and disadvantages, which should be at once instructive and interesting to all educators of the Deaf. His great, and perhaps his only, disadvantage will be found to lie in his inability to absorb knowledge through his ears, and to follow directly in the paths established by his predecessors. To arrive at the goal he must veer more or less from the beaten tracks, and oftentimes the way is tortuous and far. But to the stout heart and the steady traveller no ways are too difficult, no paths too long.

"The advantages which may accrue to the Deaf are infinite, and represent all the flexibilities to which the life of a human being may be subjected. Indeed, in certain cases they have become so great that one may wonder whether their combined effects have not overcome the one great handicap of deafness. The advantages are both interior to the man and exterior. By interior is meant whether they are inherent in the person, whether he was born with a good brain, and the activity, determination, and tact to carry a project, once launched, through to completion. Under exterior advantages we include aid which he received from outside sources, such aid as may be secured through the influences of a good home, influential friends, good schools and teachers, and the innumerable aids which may be procured through financial means, such as private tutoring and the constant association with people of education and refinement. While we have only to do with the latter advantages, it may be said that all the graduates therein enumerated enjoyed at least part of these advantages, and some of them were fortunate enough to possess nearly all.

"Without going into details as to how each individual secured his education, I shall endeavor to give a general classification of those points of interest which may arise amongst all persons concerned in the education of the Deaf. We may consider:—

"1. *Whether the Deaf man was a congenital or semi-mute.* If the latter, the age at which he became Deaf, and whether or not he retained his speech. We all know the advantages which accrue from the acquirement of language before the loss of hearing. The use of speech greatly lessens the difficulties of communication between the Deaf and the hearing. All but two or three of the seven graduates were born Deaf, or became Deaf at an age at which they may be properly classified as congenital mutes. With two exceptions, all received instruction in articulation and lip-reading.

"2. *The extent of hearing, if any, which the Deaf man may possess.* It is hard to draw the line of demarcation between a hard of hearing person

and what we usually call a 'Deaf-Mute.' Only one of our graduates is not totally deaf.

"3. *The source of preparation for college;* whether he came directly from a school for the Deaf, or from a hearing school with teachers versed in the art of preparing pupils for university entrance examinations. The curriculum of admission-requirements to the modern American University is so broad that it is difficult to find amongst the ranks of teachers of the Deaf those who are qualified to prepare their pupils to pass the same. Consequently, it is not surprising that only two of the graduates came to college directly from a school for the Deaf.

"4. *The standing of the university.* Of the numerous universities and colleges in the United States, only eight or ten are of recognized first-grade standing. All four of the universities mentioned herein are of such standing. Harvard University is the oldest and most prominent university in the United States. The University of Columbia and the University of California are newer universities, which have come rapidly to the front in the last few decades. They rank with Harvard as the three largest universities in America. Yale University has long been a leading American seat of learning. In general it may be said that these universities require of their students an understanding of what they have studied, and that they pursue their speciality to such an extent as will enable them to apply it practically, as a means of support, immediately after graduation.

"5. *The course pursued at college.* While colleges and universities endeavor to put their courses on an equality, it is evident that many courses are particularly adapted to the Deaf. Such courses are those which give a large amount of time to text-books and laboratory work and dispense as much as possible with lectures. Either a list of the courses taken, or of those required for graduation, will be found under the respective names of the graduates.

"6. *The extent to which he mixed with his fellow-students in their games and social intercourse.* While a student is sent to college primarily to acquire an education, it is coming to be more and more recognized that the knowledge of men which he obtains by personal contact with professors and students plays a large part in his success in after life. All the graduates testify to the great benefits which they obtained from such associations.

"7. *The help which he received during his collegiate course.* Under this must be included private tutoring or 'coaching' and changes in the order of conducting class-room exercises for his particular benefit. It is evident that a Deaf student attending college may be so surrounded with private help, as to remove all obstacles caused by his loss of hearing. This would seriously detract from the credit which he would be entitled to as a 'Deaf' student, but in only one instance was the amount of coaching excessive, and this for a limited time only. In several cases there was no private help at all, while the rest of the graduates got along with no more coaching than is employed by the average hearing student."

* * * * *

"Having considered the graduates, the question arises as to just about what place is to be given to the graduate amongst the Deaf as a class. While he may be considered as embodying the 'ultima thule' to which the education of the Deaf may be carried, we must remember that this education is only the means to the end. This end is the practical application of his education to his success and happiness in after life. Strictly speaking, however, he is endeavoring to give an illustration of

the limits to which the education of the Deaf can be extended. In the struggle for existence in the world, everyone is accustomed to draw upon all the resources at his command. Naturally things have so shaped themselves that all five senses are called into play to the limit. The Deaf man having only four senses is handicapped to that extent. One of the objects of the education of the Deaf is to so cultivate these four senses that they will supply the gap left by the loss of the fifth sense. The Deaf man in an university of books, just as in the larger university of life, is under a continual struggle to stretch out his four senses into a fifth. As a graduate, he not only carries away with himself a foundation upon which to later on build a liberal education, but also an understanding as to what to do and what not to do which will assure his free and easy intercourse with hearing people. His success in after life, as well as may be judged from the limited number of graduates, is at least moderate, indeed excellent as the Deaf go.

"With the present status of the education of the Deaf, any pupil of somewhat more than normal ability, who manifests an early inclination to study, and has the perseverance and the instructors to carry him forward, ought to be able to enter a higher institution of learning. He will also be greatly benefited if possessed of good home surroundings and an inclination to mingle with the hearing. In general it will be found necessary to make the transition from the school for the Deaf to the University, not directly, but through the means of some intermediate preparatory school. The university will do all it can to bring out what is within him. It may be somewhat hampered, being unacquainted with the limitations of its charge, but it will treat him as the world will treat him, and in addition to an education of books, it will give him a knowledge of humanity such as rarely falls to the lot of a Deaf man either in business or society.

"As regards the life of the Deaf student at college, it will be found practically the same in all cases in the class-rooms, the libraries, and the laboratories. Deaf students who are successfully pursuing a course in a university are on something of a par as to studious ability, and they will be found endeavoring to attain the end through the most serviceable and practical means, which upon investigation have been found in every instance to be substantially indential. In the class-rooms these means consist in copying notes of the lecturers' speech from the students sitting next at hand, and having caught the drift of the remarks to usually transfer the seat of operation to the library, where by the aid of books selected more by instinct than anything else, the gist of the lecture can be sifted down. In the laboratories, by close attention to the work and frequent consultations with the professors, who are more approachable there than in the class-room, more thorough and rapid progress can be made.

"Life on the campus and in the clubs and dormitories is subjected to greater divergence amongst the Deaf students. Here some by means of the pad and pencil, or speech and lip-reading, if they have it, will show far more activity than others, who may be socially uninclined. However much he may try to remove the obstacles, a Deaf student in a hearing school cannot help losing some of the college intercourse, or however much he may be disinclined to mingle socially, he cannot avoid rubbing shoulders to some extent with his brethren, and deriving benefit thereby."

American Annals of the Deaf, Washington, D. C., November, 1903.

In this issue of the *Annals*, Mr. James L. Smith concludes his interesting series of papers on characteristics of pupils to which reference has been made in this department of *THE REVIEW* as the several numbers have appeared. This last contribution deals with "Moral Characteristics of Pupils," and is divided into two parts, the first of which cites instances illustrating the presence or absence of moral and religious instincts in their pupils that have come under the observation of the teachers of the Minnesota school. The second part gives the opinions of the teachers regarding the best methods of developing and training the moral and religious nature of the pupils.

Another valuable article, from both a psychological and a pedagogical point of view, is "Edith's two first Years at School," by Mr. Theodore A. Kiesel, of the Kendall School. This presents a full and careful record of the work done and results obtained with an unusually backward deaf child. There could hardly be a more discouraging case than (from Mr. Kiesel's description) this would appear to have been, and that so much was accomplished should cause teachers to hesitate before labeling as hopeless any deaf child who may find its way into our schools.

Other articles are "Teaching from Objects," by Lula E. Carpenter, of Flint, Michigan; "The Education of the Deaf in Australia," by Samuel Watson, of Sydney, New South Wales; "Geography Teaching," by Arthur G. Mashburn, of Little Rock, Arkansas; "The Training of the Sense of Sight," by Katharine F. Reed, Milwaukee, Wisconsin; and "The Deaf and Poetry," by Hypatia Boyd Reed, Mensha, Wisconsin.

Nordisk Tidskrift for Dofstumskolan [Scandinavian Journal for the Education of the Deaf], Nos. 6 and 7, 1903, Göteborg, Sweden.

"Observations regarding deaf children before they are of school age," by Fr. Scheele. The most significant reform which education in our days strives after is the fact that all education

must be based on a thorough knowledge of the child's nature in general and of the individual nature of a particular child. The need of such knowledge is still greater as regards children that are not normally endowed than as regards those who are in the full possession of all their senses. We possess a better general knowledge of the latter, we can refer to the recollections of our own childhood, and we can on the whole draw pretty correct conclusions from the mental condition of normally endowed grown persons. These sources of knowledge are to a great extent lacking regarding deaf children.

From the time when a deaf child enters the school, there are ample opportunities to become acquainted with its mental condition; and with this knowledge as a basis the education of the deaf has been able to make the vast progress which we have witnessed during the last century. But at the time when the child enters the school for the deaf, it has already gone through a long period of development, and it is impossible to thoroughly learn to know its mental condition unless an insight into its previous development can be gained.

Here is a gap in the child's psychology which must be filled, not only for the sake of the education of the deaf, but also for gaining a more general psychological and educational knowledge. The merit of having first in an energetic manner called attention to this matter belongs to Dr. Alexander, who delivered an address on the subject at the last meeting of the Austrian teachers of the deaf; and since then it has been discussed in various German periodicals.

The observations which I refer to can only in exceptional cases be made by teachers of the deaf. We must look for assistance to the first surroundings of the child, more especially to its parents. To give an idea of the ground to be covered by these observations, I suggest the following questions, which should be answered by competent persons, parents, relatives, etc. The answers should not be given in general, theoretical terms, but should give personal observations made in individual cases. If possible, the answers should be put down as soon as the observation has been made, and should not be based on old and uncertain recollections.

1. Did the mother during the period of pregnancy notice anything unusual that could possibly bear some relation to the child's defect?

2. Was the child born under normal conditions? Were its screams different from those of other children?

3. Were the sounds uttered by the child during the first years of its existence different from the sounds uttered by other children?

4. What was the child's temper during the first years?

5. From what serious sicknesses did the child suffer during the first years?

6. When was the defect in the child's nature first discovered, and in what manner?

7. When the defect was discovered, what reasons were there to suppose that the child previously and possibly from its birth, was deaf?

8. When did the child learn to walk? Before or after its brothers and sisters?

9. Has anything else of an anomalous nature been observed, as regards the child's senses and actions?

10. What has been observed relative to the child's perceptions—as distinguished from those of normally endowed children—of forgiveness, gratitude, veracity, sense of right and wrong, the beautiful, order, cleanliness, etc.?

11. Has the child been disobedient, stubborn, violent?

12. When did the child first use signs to make itself understood? What kind of signs were these? What was the development of this sign-language? Did the child learn any of these signs from others? What signs did the persons of the immediate surroundings of the child employ to make themselves understood by the child?

13. How far back did the child's recollection reach at its different ages?

14. For what occupation did the child manifest a special predilection?

15. Was the child allowed to occupy the time by itself? What was its favorite occupation when left to itself?

16. If the child was not born deaf, when did it become deaf? How was it first noticed that it had lost its sense of hearing? Has its hearing undergone any noticeable changes for the better or for the worse? How much could it talk at the time when it lost its hearing? Was it noticed that it gradually lost its faculty of speaking? Which words were remembered longest? Which words rose up first in the child's recollection, when speech began to be recovered? What important changes were noticed as a consequence of the loss of hearing, as regards temper, intercourse with others, etc.?

17. Was it noticed that the child made attempts to imitate the motions of the lips of speaking persons?

Many other questions might be asked; but direct and truthful answers to the questions given above will doubtless prove important aids to the teacher of the deaf.

It is, of course, not to be expected, at least in the beginning, that a very large number of children will be made the subject of such observations; but even if these observations are at first limited to a few, much will be gained; and the example will soon be imitated by others.

Many deaf children come from refined and educated families, and here probably the matter will be taken up with the greatest interest. Parents who are not able to make these observations themselves, will probably come in contact with other educated and interested persons who will aid them.

"The Fine Art of Lip-Reading," by Mrs. Mabel Gardiner Bell, translated by Hedewig Rosing. "The present condition of the education of teachers of the deaf in some of the countries of Europe, (2, Sweden)," by A. F. Nystrom. The idea of a special course of training for teachers of the deaf was first broached in the Swedish Parliament in 1809-1810, but was not favorably received at the time. The way teachers were supplied in the beginning was this, that Mr. P. A. Borg, the Director of the principal Institution at Manilla, selected some of the best pupils, and gradually trained them to become his assistants. After Borg's death, recourse was had to teachers of the public schools, selecting as far as possible those who showed some interest in the deaf and their welfare. During the seventies a so-called "teachers'

seminary," or normal school for teachers, was kept up in connection with the Manilla Institution. From 1879 to 1889 the students of the "seminary" above referred to, as a general rule, passed an examination, which, however, was not yet obligatory for obtaining an appointment as teacher at an institution for the deaf. The law of 1889 relative to the education of the deaf, at last, established the "seminary" on a firm basis, it receiving the official designation: "Government Seminary for the Education of Teachers for the Deaf" at Manilla; a two years' course of study, carefully prepared to meet the special needs of a school for the deaf, was established; and no one was henceforth permitted to become a teacher of the deaf, unless he had passed a vigorous examination at the end of the two years' course, and could show his certificate.

Statistics of the Norwegian Schools for the Deaf: The Christiania public school for the deaf, 1901-1902: pupils, 75—37 boys and 38 girls, distributed over nine classes; teachers, 9—4 gentlemen and 5 ladies; annual expenditure, 52,043 kroner, 72 ore (\$14,108.32). The Holmestrand public school for the deaf, 1901-1902: pupils, 52—28 boys and 24 girls, distributed over 6 classes; teachers, 6—2 gentlemen and 4 ladies; annual expenditure, 38,191 kroner, 61 ore (\$10,235.35). The Trondhejem public school for the deaf, 1901-1902: pupils, 70—36 boys and 34 girls, distributed over 7 classes—the lowest in three divisions; teachers, 9—4 gentlemen and 5 ladies; annual expenditure, 42,272 kroner, 68 ore (\$11,328.89). The Gloschaugen public school for the deaf at Trondhjem, 1901-1902: pupils, 44—25 boys and 19 girls, distributed over 6 classes; teachers, 6—2 gentlemen and 4 ladies; annual expenditure, 34,339 kroner, 32 ore (\$9,402.93). The Hamar public school for the deaf, 1901-1902: pupils, 63, distributed over 15 classes; teachers, 7—4 gentlemen, 3 ladies 1 lady; annual expenditure, 76,634 kroner, 73 ore (\$20,538.10).

Statistics of the Danish Schools for the Deaf—(only two out of the total of three schools are given): Royal Institution for the Deaf at Fredericia; 1900-1901: pupils, 185, distributed over 18 classes; teachers, 20—12 gentlemen and 8 ladies; annual expenditure, 130,623 kroner (\$35,000.96). Royal Institution for the Deaf at Copenhagen, 1901-1902: pupils, 70—42 boys and 28

girls, distributed over 8 classes; teachers, 9—8 gentlemen and 1 lady; annual expenditure, 76,634 kroner, 73 ore (\$20,538.10).

Statistics of the Swedish Schools for the Deaf, 1902-1903:

	Pupils.	Boys.	Girls.	No. Classes.	No. Teachers.	Male.	Female.
Manilla,	121	66	55	20	17	10	7
Vaxio,	91	50	41	10	11	4	7
Lund,	63	34	29	9	10	6	4
Karlskrona, . . .	30	14	16	7	5	2	3
Vanersborg, . .	161	90	71	17	18	8	10
Orebro,	37	20	17	7	8	4	4
Gafle,	87	58	29	10	11	6	5
Harnosand, . .	180	102	78	18	20	10	10
Hjorted	17	8	9	4	3	3	—
Stockholm, . .	24	7	17	7	5	—	5
*Vanersborg. .	6	2	4	6	6	—	3
Bollnas	39	23	16	4	4	2	2
Private.							

“Meeting of Scandinavian Educators of the Deaf at Stockholm, July 6-10, 1903.” When this number of the Journal was printed, this meeting was still a thing of the future, and all we can give here are some extracts from the official program; more particularly some of the subjects on which papers will be read and which will be discussed: “On the necessity of absolutely sure means of communication in the instruction of the Deaf.” “Signs and Speech.” “Should the partially deaf be instructed with those absolutely deaf?” “To what degree may the speech used in instruction differ from the written language?” To what extent should printed text books be used?” “What shall be done as regards the further education of the pupils who have left school?” “In what direction should we guide our deaf pupils for earning a livelihood?” The place of the Deaf in practical life.” Thus it will be seen from this very incomplete list that a great variety of interesting subjects will be treated at the meeting which will be attended by all the prominent educators of the deaf in Denmark, Norway, Sweden, and Finland. The governments of most of these countries have appropriated the necessary amounts for the journey of their delegates.

Miscellaneous information: As the Danish Parliament did not seem willing to appropriate the necessary amount for building a church for the deaf at Copenhagen, the two associations of the deaf existing in that city, resolved to build a church without any aid from the government; and building operations will

commence as soon as a suitable site has been selected. The Home for deaf girls at Copenhagen has enlarged its sphere by buying three adjoining houses; and it is intended to establish a home for the aged who are no longer able to earn a livelihood. Hitherto the home was exclusively for young deaf girls who went to work in the city during the day.

Die Kinderfehler [The Defects of Children] Langensalza. June and August, 1903.

Though there are in these two numbers but few articles specially relating to the deaf, it may be interesting to give the titles of the different articles to show the scope of the periodical: "Investigations relative to the memory of weak-minded children." "A contribution to psycho-pathology," by Karl Barbier, teacher of the deaf at Frankenthal. Mr. Barbier gives an account of the following curious case: A girl, born in 1891, in the Palatinate, the daughter of drunkard, and a sickly mother, was almost constantly sick during her early youth, and owing to diseases of the organs of hearing appeared deaf to all intents and purposes. Owing to the abject poverty of her parents, who had a large family, she received but very scanty food and less care. She mostly sat in some corner staring at vacancy, and was considered by her neighbors as a complete idiot. When she was eight years old, her father left the country, and her mother died. She now had to be cared for by the parish, and was sent to the orphan asylum in a neighboring city, where she stayed two years. Nothing, however, seemed to awaken her from her lethargy. As the authorities of the orphan-asylum finally reached the conclusion that her mental condition was caused by defective hearing, it was decided to place her in the institution for the deaf at Frankenthal. The first impression she made upon us was by no means favorable. She sat all day with a vacant stare and wide opened mouth. All attempts to remind her by signs—some knowledge of which most deaf children bring with them to the institution—of her home, her parents, her brothers and sisters, or to give her pleasure by toys and pictures, proved fruitless. Often she would suddenly begin to cry without any apparent

reason. With the exception of occasional slight colds and a running of the ear—for which she constantly received medical treatment—she became much healthier than when she entered the institution. For two years, though, it seemed impossible to draw from her an articulated sound. All she could do was to write about 10 or 15 words and indicate on pictures the objects which they represented. After the second year, however, a change came over her, almost unnoticeable at first, but nevertheless sure. All of a sudden she began to take an interest in what took place around her. As the class in which she had been placed was an articulation class, she had an opportunity to distinctly observe how the various sounds were acquired. The curious fact was then noticed that, in spite of her good sense of hearing, she took up the articulations necessary for producing the various acoustic effects, simply as optical appearances and endeavored to imitate them without using her voice. She got so far, that she spoke any word after the teacher—but invariably without uttering a sound, simply by motions of her lips and tongue, and then pointed to the object which the word represented. Gradually she could without making any mistakes connect a picture with the object it stood for. But it seemed impossible for her to go any further. Every attempt to force her to form sounds which would also be perceptible by the ear failed on account of her passive resistance. Her face then assumed an expression of absolute vacancy and dullness. In the course of time, however, a change took place also in this respect. During the intensive exercise which is positively essential for developing and fixing the sounds, day after day the powerful sounds of the vowels struck her ear, demanded admittance, and urged imitation. And behold, one day when the class was again practicing the sounds “ba, ba, ba,” she uttered the same sounds as the other pupils. In this way she also learned to pronounce the other vowels, and as the road now seemed open for the conscious formation of sounds, began to learn the consonants. And, as in the beginning, her ear sometimes left her in the lurch, she often came to the teacher to have him speak the sound for her, and ask his aid and correction. She kept at this with a never tiring energy, and her face beamed with joy when

the teacher praised her. Now the ice was broken. In a short time she learned to pronounce all letters, and spoke words and short sentences loud and distinctly. Now she is in her 12th year and in the 2d class and makes such progress not only in speaking but in other branches of knowledge such as arithmetic, that she is counted among the best pupils.

We now have to find a physiological and psychological explanation of this peculiar case. According to Herbart, the purely animal life of man shows itself in a threefold form. First we have all those processes which contribute to the nourishment of the body, e. g., digestion, circulation of the blood, etc., which Herbart terms "vegetation." The second form of animal life consists in all the motions, both voluntary and involuntary, of our muscles. This Herbart terms "irritability." The third form is the activity of the nerves, starting from two centers, the brain and the spine, or leading to these centers. This Herbart terms "sensibility." Whenever there is a disturbance in any of these three regions of animal life, it exercises an influence on the mental life of the child.

In our case there was evidently a disturbance of "vegetation." This was clearly shown by scrofulous gatherings, which even now have not entirely disappeared, the constant running of her ears, and sores on her scalp. Insufficient food and lack of proper care did the rest, and kept the blood in a poor condition. But as regards "sensibility," her condition was likewise anomalous. The disturbance of "vegetation" gradually brought about a perfectly languid condition of the nerves.

What then brought about the development of this poor girl into a comparatively normal child? Evidently to begin with, an improvement in her food which had already taken place during her stay in the orphan asylum. But all mental excitement was lacking here. Therefore, it took the three years which she spent in our institution to bring about, by good nourishing food, an almost painful cleanliness, and energetic medical treatment, such a marked improvement of the blood that the digestion, the circulation of the blood, etc., took place in a perfectly healthy manner, and caused a general improvement in her condition. The disturbance of the "vegetation" which had hitherto ex-

exercised a baneful influence on the activity of the nerves, ceased, and soon the entire psychical apparatus worked in a normal manner. "Problems of the language of children," by Dr. Paul Mass. "The Berlin Association for the education and care of mentally weak children." "A Swiss Conference of teachers of idiots."

Tratamiento Pedagógico de Los Sordomudos. Memoria presentada en la seccion VII del XIV Congreso internacional de Medicina por Don Eloy Bejarano y Sanches, Comisario Regio del Colegio Nacional de Sordomudos y de ciegos de Madrid [Pedagogical treatment of Deaf-mutes. A report made to the VII. Section of the XIV. International Congress of Medicine held at Madrid, by Dr. Eloy Bejarano y Sanches, Royal Commissioner of the National Institution for the Deaf and Blind of Madrid]. Madrid, Imprenta del Colegio Nacional de Sordomudos y Ciegos, 1903.

From the time that the Mimic was universally condemned in order to give place to the Oral instruction of the deaf, a greater need has been felt of an harmonious action between educators and physicians in the treatment of those deprived of hearing. But it is only too true alas, that the physicians until now have not taken active part in this work of the restoration of a great number of the deaf, who are shown by statistics to be condemned to loss of hearing and the consequent loss of speech from the lack of care in their infantile maladies. One of the principal causes of this neglect comes from the fact that the attendance of the students of medicine is not obligatory at the course of Otology and like sciences, and therefore the young doctors leave the university without any knowledge of auricular diseases nor of what deaf-mutism is, regarded scientifically. From this comes the frequent confusion between deaf-mutes and other individuals, who although they have sufficient hearing still are mute, and are almost always incurable because their defect depends upon cortical injuries of the brain.

After these general considerations, briefly mentioned here, Dr. Bejarano gives a rapid review of etiology, the diagnosis and prognosis of deaf-mutism. As to the treatment, this should be both medical and pedagogical. In respect to the first, Dr. Be-

jarano thinks it necessary in many cases to have the aid of the surgeon; but for this the doctors have not the necessary preparation, and do not know how to give exact indications of the condition of the deaf children wishing to enter the school. He asks therefore for a provision by means of which all doctors shall receive appropriate instruction in Otology.

In regard to the pedagogical treatment, Dr. Bejarano says that when the work of the physician alone would be useless, the educator can come to his aid in teaching artificial pronunciation. The author emphasizes the many advantages which education offers to the deaf-mute in teaching him to speak, and he gives the credit of this great invention to the Benedictine Pedro de Ponce and to his Spanish followers.

Dr. Bejarano in comparing the glory of Spain in the history of the education of the deaf with its present condition, says it is shameful the abandonment in which these unfortunate creatures are left, owing to the neglect and criminal indifference of society.

Spain numbers 12,200 deaf-mutes and of these only 400 are admitted to the ten institutes existing. The others—more than 11 thousand—are deprived of any culture. Every effort of the government for extending the instruction of the deaf has as yet been quite in vain, on account of the unstable political condition of the country.

Dr. Bejarano comes to the following conclusions:

I. The pedagogical treatment of the deaf by means of the Oral method—either alone or in combination with auricular exercises of Dr. Urbantschitsch—is a problem of pedagogical medicine, and therefore the physician must always be consulted for its solution.

II. As the diseases of the ear and nose, from which deaf-mutism can be produced, are rather frequent, it is quite necessary that the physicians should acquire sufficient knowledge of oto-rhynology. To ensure this Otology should be obligatory like the other branches of medicine.

III. Exact statistics of the geographical distribution of deaf-mutism do not exist as yet, and therefore it is not known how many deaf are in Spain at present. It is necessary that statistics should be compiled by means of the sanitary delega-

tions, which are already in connection with every judiciary district of the country.

IV. In order to give some assistance to the distressing abandonment in which the deaf have been left by society, it would be well to organize a league against deaf-mutism, like those, already organized, against blindness and tuberculosis. In this way it would be possible to diffuse knowledge of the many curable cases of deafness and consequently of mutism.

V. A law for public instruction of 1857 established that a school for the deaf should be opened in every place where there was an University, but until now only three schools have been opened, and it is necessary therefore to urge the provincial deputations to put this law into practice. If this is not yet practicable, the government should declare the education of the deaf obligatory.

VI. Spain is obliged, more than any other state, to promote the instruction of the deaf, because she has the honor to be the native country of Pedro Ponce de Leon, who was the first in the world to teach the deaf to speak.

In an Appendix to his valuable report, Dr. Bejarano publishes a series of interesting documents relative to Pedro de Ponce and his wonderful invention.

Revue Generale de l'Enseignement des Sourds-Muets
[General Review of Deaf-Mute Education], Nos. 1, 2, 3
Paris, May, June, July, 1903.

"In memory of Mr. Désiré Giraud, Director of the Paris Institution"; account of the funeral ceremonies, and speeches pronounced at the grave. "Essay on the conditions which should assure the success of teaching the young deaf to speak" (continued through two numbers of the Review): Complex phonetic associations; aptitude of a deaf child for speaking and instructing himself, by B. Thollon. Life and works of the deaf sculptor Claude André Deseine, 1740-1823, by G. LeChatelier. Deseine during the French Revolution made busts—which was his speciality—of many of the actors in that great drama, e. g., Mirabeau, Danton, etc.; and of several of the prominent French authors of the time, e. g., Voltaire, Rousseau, etc.

Bericht der Taubstummenanstalt für Hamburg und das Ramburger Gebiet für das Jahr 1902, und das Schuljahr 1902-1903 [Report of the Institution for the Deaf at Hamburg and its district for the fiscal-year 1902, and the school-year 1902-1903].

The Institution for the Deaf at Hamburg has published the report of the 76th year of its existence. It is an institution where day-pupils and boarders are both admitted. Last year the number of pupils was 99—48 boarders and 51 day-pupils. The school, however, gives lunch to all those who attend. When the pupils are 16 years old, they leave the school for apprenticeship in some manual work. But sometimes it happens that the parents take their children out of school before they have finished the course of study. Besides this, it has been observed that the attendance of the school is rather neglected by the day-pupils, and "there is no need of a special demonstration," says the Principal of the Institution, "in order to prove that such a neglect is more dangerous to progress in the instruction of a deaf than in that of a normal child."

The Institution takes some care also of the adult deaf who have graduated from it. A complementary course has been established for this purpose, and a charitable fund permits the assistance of the poor deaf who for some reason are without work.

In the school the German method is practiced, and the Principal says that in comparison with the old method, Oral teaching is much more suitable for the deaf, not only for their intellectual and moral development, but also in regard to their physical welfare.

Pensieri Sull'Insegnamento Dell'Aritmetica ai sordomuti e proposta d'un programma didattico d'aritmetica [Some Thoughts on Teaching Arithmetic to the Deaf, and the proposal of a special didactic program of arithmetic], by Antonio I. Argiolas. Cagliari, P. Valdés, 1903.

Dr. Argiolas in this new work of his, demonstrates the skill of an experienced teacher of the deaf, of which he has already given proof in his previous works on special didactic subjects. The author recommends, in teaching Arithmetic, the principle

of the Oral method, in which according to Mr. Hill *every branch of study should serve to teach language*. A convinced advocate of the pure oral method, Argiolas reminds us that each thing taught must be spoken by the teacher and pupil, which suggests to him the idea of placing as the basis of teaching, the same principle as that of the teaching of language, that is: "to keep scrupulously to the pure oral method."

The following principles are then given together with their exposition:

1. Endeavor to obtain the development of all the psychic faculties of the deaf-mute.

2. Require the actual, lively, and continuous cooperation of the pupil.

3. Make the pupil do the school-work himself under the guidance of his teacher.

4. Require from each pupil the greatest attention possible.

5. Above all give to the pupil in every lesson a clear, true idea of the thing taught, placing before his eyes the real object or its likeness.

6. Follow the logical order of ideas in every branch of teaching, and do not pass to a second idea until the first has been perfectly understood.

7. Arrange every exercise in such a manner that the induction comes spontaneously, and continue the exercise until all the pupils have understood it and know how to perform it.

For the publication of this principle the author cannot sufficiently recommend the objective method, the form of dialogue, the law of graduation, and repetition.

The program proposed by Argiolas for teaching arithmetic is very limited; but corresponds well to the limited course of study of the Italian deaf, who remain at school only 7 or 8 years, and are admitted at various ages, and not regularly always at the beginning of the school year.

Le Istituzioni Americane per l'educazione dei sordomuti
[The American Institutions for the education of the Deaf],
by G. Ferreri. Palermo, A. Reber, 1903.

G. Ferreri, the late Vice-Principal of the Institution for the Deaf at Siena (Italy), who visited the United States last year

in order to study the organization of our schools, now publishes his impressions in a neat volume of VIII-380 pages. We cannot give at present a judgment in regard to the work of the Italian colleague but we think that a simple list of the contents of the book will give our readers an idea of its value.

The volume contains a Preface and XIV Chapters with the following titles:

I. The American schools for the instruction of the deaf. II. The methods of instruction in the American schools for the deaf. III. The course of instruction. IV. The higher education of the deaf in America. V. Kindergartens for the deaf. VI. Boarding and day-schools. VII. The coeducation and religious education. VIII. The physical education. IX. The training of teachers. X. The cause of the deaf and the means of propaganda in America: 1, Periodical and occasional press; 2, Meetings and Congresses. XI. Public commencement Exercises. XII. Some didactic questions: 1, Pronunciation and speech; 2, Teaching of Language; 3, Love of reading; 4, Matters of general culture; 5, Auricular teaching. XIII. The education of the deaf-blind. XIV. Helen Keller.

In an Appendix, Prof. Ferreri collects some articles already published in various publications during his stay in America, and relative to our educational work.

Memoria del Instituto Nacional de sordomudos correspondiente al año 1902 [Report of the National Institution for the Deaf (boys), for the fiscal year 1902]. Buenos Aires, Argentine, 1903.

The past year there were 88 deaf pupils attending the course of study at the National Institute of Buenos Aires, an increase of 10 over the number of the preceding year. The Institute was honored by a personal visit from the Minister of Public Instruction, who was thus enabled to verify the usefulness of the Institute for the Deaf of the Republic. In the department of manual training, they had obtained very good results in the shops of cabinet-work, for which trade a large number of the pupils show considerable talent. One of the teachers, Mr. U. Codino, had been given a year's leave of absence in order to visit Europe for the purpose of study.

THE INSTITUTION PRESS.

They Know English.

"I want to say that no matter how little the Rochester school product knows, he knows his English to the limit—the deaf-mute jargon language is an unknown thing to Rochesterians."

So writes Alex. L. Pach in the *Silent Worker*. The Rochester school, as all should know, is the one in which the manual alphabet is used exclusively in communicating—unless speech is employed. No signs are used for any purpose, and they are absolutely prohibited. The result, as announced by Mr. Pach, who has met many graduates of the school, is that they "know their English to the limit."

This is certainly unprejudiced testimony. Mr. Pach, himself deaf and a graduate of a school for deaf-mutes, is probably personally acquainted with as many deaf persons as any man in the United States. He is an old newspaper man, a forceful writer and strong thinker. His association with the active business world as press agent for theatres, and in other lines, has broadened him and made his judgment (be it said with all due regard for the deaf) more that of a hearing man than of a deaf one. Therefore we think that his testimony is competent.

Mr. Pach does not attempt to start an argument. There are some who maintain that an education in English and by English does not develop the minds of deaf persons as they are developed by the use of signs; they charge, too, that the deaf do not acquire the same amount of information. Those who desire to argue these points may do so. Mr. Pach does not concern himself with them, but grants that there is room for a discussion by the qualifying clause, "No matter how little the Rochester product knows." His great point is that the Rochesterian "knows his English."

Does not one who knows English have within him the possibility of developing along any line he may choose? We think he has. So, after all, the deaf person who knows English has accomplished the greatest thing toward sound, broad culture. In this the Rochester school is successful. The increased following the school is having year after year in the continual use of the manual alphabet, in school and out, would seem to indicate that the truth is being recognized generally.

Incidentally, the rule has been for several years in this school, but more emphasized than ever this year, that the sign-language must give way entirely to the use of speech, writing and manual spelling in the school-rooms.—The *Silent Hoosier* (Ind.)

Successful Deaf Men.

In a recent competition for the best design for an electrical tower to be located on the exposition grounds at St. Louis, Mr. Thomas S. Marr, of Nashville, a graduate of the Tennessee school, and of Gallaudet College, was the successful architect. The tower is to cost \$200,000. Doug-

las Tilden, of San Francisco, had his design for a memorial to the California volunteers in the Philippines accepted over a large number of other plans. Mr. Olof Hanson, of Seattle, is superintending the construction of a United States building from plans prepared by himself, accepted from among those of dozens of competitors, and these are only a few instances out of many that illustrate the ability of the deaf to make their way. Give the deaf boy a chance at a good education and if there is anything in him his parents need not worry as to what is to become of him when they are gone.—Kentucky Standard.

Deaf Teachers.

In a recent issue of the *Deaf American* there was an editorial with which we feel bound to take direct issue, inasmuch as it misrepresents and does manifest injustice to deaf teachers.

In the first place the editorial says that deaf teachers are not wanted in many of the schools. They are. Every year sees appointments of new deaf teachers, mostly from the ranks of Gallaudet College graduates, and the proportion between deaf and hearing teachers has changed but slightly for many years past.

We are told that one superintendent said, "I have more trouble with my deaf teachers than with the whole of the hearing teachers combined." It is barely possible that the superintendent himself was the cause of the trouble. Veteran superintendents like Gillett, Noyes, Wilkinson, Clarke, Williams, Swiler, and others, both in practice and in testimony, refute what the above one superintendent said.

The writer says that the deaf teachers "do not, or will not, keep abreast of the times, or take the interest in the class-room that the hearing teachers do." This statement we pronounce to be unqualifiedly untrue. We admit that among the whole body of deaf teachers here and there may be found one who is not worthy of the position he occupies, and makes no effort to live up to it, but the same are found among the hearing teachers, in equal, if not greater, proportion. If the statement were to be established as a fact, then would it stultify the able and experienced superintendents or principals of the many schools for the deaf in which deaf teachers are now occupying the highest and most responsible positions, and have done so for years past. We adduce, as living examples of the unjust and untrue nature of the whole editorial, such deaf teachers as Fox, of New York; Lloyd, of New Jersey; Seliney and Jewell, of Central New York; Davidson, of Mount Airy; Allabough and Teegarden, of Western Pennsylvania; McGregor and Patterson, of Ohio; McClure, of Kentucky; Kearny and Deem, of Mississippi; Chapin, Hays, and Boland, of West Virginia; Michaels, of Arkansas; Freeman, of Georgia; Berg, Vail, and Morrow, of Indiana; Gross, of Missouri; Long and Phillips, of Iowa; George, of Illinois; Robinson, of Wisconsin; Brown, Hubbard, and Stewart, of Michigan. The list is not complete. [The *Companion* fails to mention Smith, of Minnesota.] We have mentioned nearly all the largest schools, and in all of them the deaf teachers named occupy positions, usually the highest, and have the fullest confidence of their superior, the superintendent or principal. And in the matter of salaries there is little ground for the charge of discrimination. If there is any school where the superintendent holds a poor opinion of the deaf teachers and where there is manifest discrimination against them, it is the fault of the superintendent himself. Either he has been unfortunate in his selection of such teachers, or he is lacking in a genuine friendship for the class whose interests he has been chosen to guard.

Deaf teachers, as a rule, have the deepest interest in their work, from a fellow-feeling; they understand better than other teachers the nature and needs of the deaf child from an educational point of view, and they are the most loyal to the school, which, in most cases, is their own Alma Mater.

We believe that it is the duty of a paper published in the interests of the deaf to criticise fairly where criticism is called for, but such a paper should guard itself from misrepresentation such as the editorial here referred to indulged in.—*The Companion* (Minn.)

The New Brunswick School.

Our readers will be glad to know that provision is being made for the education of the deaf children of New Brunswick under conditions more favorable than those they formerly enjoyed. At the last session of the Legislature it was enacted that every child should be educated at the expense of the Province, and the sum of \$165 per capita was granted for this purpose. It is to be regretted that the Government did not see its way clear to provide an up-to-date and thoroughly equipped building, but this it declined to do, at least for the present. So private individuals have taken the matter up and a fine building has been purchased and is being prepared for a residential school. This building is beautifully located and originally cost over \$90,000, and some fifteen acres of land is attached to the property. It is hoped to have the school ready for the reception of pupils by the end of this month, and an attendance of from thirty to forty pupils is expected this term, though there are from eighty to one hundred deaf children of school age in the Province. The Principal of the school, which will be styled the New Brunswick School for the Deaf, is Mr. J. A. Weaver, for many years a teacher in the largest school for the deaf in England, at Margate, Kent, and more recently engaged at the Halifax Institution. Mr. Weaver came to Canada with the highest credentials of success in his twenty years experience with the deaf, and as he is to be assisted by an efficient staff of trained teachers, the new school starts under the brightest auspices, and with the best wishes of all the friends of the deaf throughout the Dominion.—*Canadian Mute*.

EDITORIAL.

Helen Keller Day at the Exposition

Announcement is made that Helen Keller is to be present and to participate at the Universal Exposition to be held at St. Louis the coming summer, and that in her honor, and in honor of her remarkable achievements in her own education, a day has been set apart to be known as Helen Keller Day. This will be the 18th of October, and it is understood that special International Congresses of Instructors of the Deaf and of the Blind will be called at that time, under the supervision of Mr. Howard J. Rogers, Director of Congresses, and chief of the Department of Education.

Miss Keller, now a young lady of twenty-three years, and blind and deaf since she was nineteen months old, will graduate from Radcliffe College, Cambridge, Mass., next June. After a short vacation, she with her teacher, Miss Anna M. Sullivan, and her mother, Mrs. K. A. Keller, will proceed to St. Louis where, at the invitation of President David R. Francis, they will be the guests of the Exposition for a week. Some of their time will be spent visiting the model schools for the deaf and for the blind, embracing twenty-two classes in all, which will be in session in the Education Building daily through the summer, and which are to be conducted under the supervision of Mr. Alvin E. Pope, and under the auspices of various national associations of educators through their exhibit committees.

Just what part Miss Keller will take in the exercises of October 18, is not announced, but she will probably be given opportunity to meet the public at some special gathering where she can present the work of the education of the deaf-blind in a way not only to enlarge knowledge of it, but to win generous and willing support for it among the people. F. W. B.

**Old Testament
Stories**

There are some educators of long experience who do not believe in the Old Testament stories as reading, or a subject of study, for children, partly, it may be, because the memory of the impression they made upon them in their own childhood has been dulled or distorted by time, and partly because of a super-refinement of theory resulting from long continual analysis of educational practices. However, most successful teachers, and the great majority of good men and women everywhere, are agreed that the moral influence of these stories upon children is wholly good. They furnish them with rough-hewn ideas of Divinity—of the love, justice, and mercy of God, and of his interposition in the affairs of men, as shown by the rewards of the righteous and the punishment of the wicked—that serve as a guide and restraint in their conduct through life, and which the natural development of mind and character, aided by the instruction of the school and of the church, will gradually shape and polish into the higher ideals of Christian belief and practice.

We notice that at a recent meeting of the Minnesota School teachers, to discuss the mental and moral characteristics of pupils, the instructor of the highest class, himself a deaf man and of long service and acknowledged success in the work, made a strong plea for the Old Testament stories, claiming that, "Every year of the deaf child's life, from the second to the end, Bible Stories should form a part of the Sunday instruction, simple at first, and more elaborate with advancing grades." We believe this but expresses the opinion of at least 90 per cent. of all teachers and the unanimous belief of the educated deaf themselves.

The Pennsylvania Institution for the Deaf and Dumb has lately issued a little volume of these Old Testament stories, adapted by the teachers of the third grade classes of the Advanced Department for the use of their pupils, which should receive a warm welcome in schools for the deaf. The title is "Bible Stories from the Old Testament Adapted for Children." It will be noticed that it does not say *for deaf children*. This is as it should be: the deaf do not need special reading, but should rather be taught to understand and make use of ordinary

books, such as they must depend upon for intellectual growth after leaving school. However, all children require books whose contents and language are adapted to their stage of development, and we claim that no one is so well prepared to fill this want as teachers of the deaf, whose work has taught them to distinguish clearly between what is really simple in thought and diction and what only appears so to the ordinary adult mind. We are certainly justified in this opinion by the book of which we are speaking. The language is simple, without straining after simplicity, and while deaf children in intermediate grades will have no difficulty in understanding it, it will be quite as interesting and helpful to young hearing children.

The book is five by six inches in size, and contains seventy-five pages of text, on which are given fifty-one of the most familiar Bible Stories. There are also nineteen engravings on plate paper that add greatly to its attractiveness. At the end of each story the book and chapter of the Bible from which it is taken are given, and the table of contents is arranged alphabetically for convenience of reference. It is bound in a flexible cloth cover, and is in every respect a credit to the office in which it was printed.

S. G. D.

**Teach Language
Idiomatically**

However much educators of the deaf differ as to methods, we are all agreed that the teaching of language is the most important part of our educational plan, and in that respect all our roads lead to Rome.

Is the success we achieve commensurate with our desires? Do the average of the deaf attain a satisfactory command of colloquial English?

Leaving out of the question the class of the deaf called "semi-mutes," and the small proportion of others who seem to have a natural aptitude for learning language, the average of the deaf do not acquire a satisfactory use of idiomatic English. In many cases their language is grammatically correct, but it is too often peculiar in that it lacks idiom. Language may be strictly grammatical and yet not idiomatic, not language "as

she is spoke." Idiom is what makes a language natural, supple, flexible.

The language of the average of the educated deaf is too often stilted and unnatural in that it lacks idiom. And a large part of the fault lies, I think, in wrong methods of primary instruction. Too much pains is taken to eliminate or avoid idioms in the earlier years of instruction, for fear that they may confuse instead of helping.

To illustrate the point I will present a few instances of actual occurrence in primary instruction:

"Mary wears a red waist." This is correct grammar but bad English, since the idea in mind is correctly expressed by the idiom "has on."

"A man shoots a bird," is faultless as to grammar, but it would be exceedingly painful to any bird to be shot at as a habit on the part of any man. The action is momentary, and, on this occasion, past at the time of writing, yet there are many teachers who warmly advocate teaching children this form in their first year, arguing that in some ways the habitual present form is easier to teach than the actual present or the simple past.

There are teachers who will teach the pupils to write sentences like this, "John gave a book to me," instead of the common idiomatic form, "John gave me a book," and justify themselves by saying that the former agrees with the regular order as prescribed for sentence construction.

In describing a picture the children are taught to write, "A man drives a horse," "Some boys play ball," etc., on the plea that the forms "is driving" and "are playing" would be too difficult for the immature minds to grasp.

I once knew a teacher who was something of a precisian in the matter of language teaching, who made it a point to teach her class "sit," "stand," "fall," instead of "sit down," "stand up," "fall down."

Symbols and diagrams of various kinds have been devised to aid in teaching young deaf children to write grammatical sentences. However meritorious these may be when used intelligently, too strict an adherence to them necessitates the elimina-

tion of idiom. Idioms object to the strict rules of grammar, and rebel at the strait waistcoat of diagrams.

It is easier to go down hill than up, but I cannot see the force of an argument that it is better to teach an incorrect or unidiomatic form of language because it is simpler and easier. Apply the same principle to the moral instruction of a child, and say : "You may do wrong just now, because it is simpler and easier, but by and by, when you are better fitted for it, I will teach you what is right."

For one thing, it is not so easy to make the necessary correction when the time comes. An experience of twenty years as a teacher of advanced pupils has proved to me that the incorrect use of the habitual present form, taught in the first year, clings to the children like a leech. Only the other day I had to correct three instances of its misuse in my class room during the course of one language lesson.

I would not be understood as advocating confusion or over-crowding in the language teaching of the early years. System and simplicity can be maintained in teaching what is right as well as in what is wrong. The one principle that should guide every teacher is, "Teach forms of sentence construction and idiomatic expressions as the minds of the children are fitted to take them up, and when you do teach them, teach them *right*."

The very best teachers are needed in the primary grades, as so much depends upon the foundation. And these teachers, presupposing that they have a mastery of idiomatic language themselves, should be under the general instruction to teach language as they themselves would use it.

After an experience of a score of years in the work, I am forced to say that some part of the stilted and unidiomatic English of the graduates of our schools for the deaf is due to the elimination of idioms during the early years, and to the teaching of forms that cannot be considered good colloquial language.

An able teacher of long experience has often made the following remark to me, which contains more truth than is pleasant to our self-esteem: "It is surprising how well our pupils do come out in spite of their teachers."

J. L. SMITH.

MR. HITZ IN EUROPE.

In personal letters to Dr. Alexander Graham Bell and to the editor of the *REVIEW*, Hon. John Hitz, Superintendent of the Volta Bureau at Washington, D. C., gives an account of his recent trip through Europe, an account so interesting in the details related that we have obtained permission to use it for the benefit of our readers. The trip was taken by Mr. Hitz partly for the purpose of visiting his native land, Switzerland, but more largely, in the interest of matters connected with the work of the Volta Bureau. Absent from this country three months or more, he passed through France, Switzerland, Germany, and Holland, stopping to visit schools for the deaf en route, and in Germany attending the Congress of the Federation of German Teachers and Superintendents of Schools for the Deaf, held at Frankfurt-on-the-Main. It will be particularly gratifying to Mr. Hitz's legion of friends the world over, to note the cordiality of his reception wherever he went, and it will be gratifying as well to all our American readers the evidence of the regard for the Volta Bureau and of the appreciation of its work, that prevails throughout Europe. The account of the earlier stages of his tour Mr. Hitz gives in a letter to the editor, and from this we quote the following:

"I left New York for France July 15th, per Holland-American Line, landing at Boulogne-sur-Mer, and proceeded to Paris, where I arrived a day too late to attend the closing exercises of the National Institution, which I visited, however, being very courteously received by the officers in charge. From there I proceeded to the Lyons school, where Director Hugentobler had invited me to be his guest, but vacation had also commenced. Thence to Switzerland where I spent a month visiting personal friends, and also devoting considerable time in research relative to the history of John Conrad Amman, of whom, in his native place, I finally discovered an excellent portrait—an account of which I will some day write up when I get a good cut made—and some additional data of his sojourn in Holland, which I have prospects of attaining in the course of time. In Switzerland I also visited a number of schools for the deaf and blind, more especially the asylum in Lausanne, where the blind-deaf Meyestre was educated, and an admirably conducted school for the deaf at Locarno, on the shores of Lago Maggiore; likewise Dr. Kull's institution at Zurich, and the

boys' and the girls' schools near Berne, the well known Arnold school at Richen near Basle, now conducted by Director Heusler-Backofen, and also, Sept. 20th, in Berne, I attended the interesting religious services for the deaf, conducted orally by the City Missionary, Rev. Mr. Isel, assisted by the accomplished and greatly respected General Missionary for the Deaf, Mr. Eugene Sutermeister, who is interested in a publishing firm, is himself a creditable author, and officially the appointed visitor of the deaf in the Canton of Berne. The meeting was attended by eighty or more adult deaf, who seemed to take the deepest interest in the service, what was said, and voted themselves to have a second service in the afternoon, after partaking of a modest lunch—dinner provided by Mrs. Sutermeister and other friends of the deaf in Berne. On leaving Switzerland, I visited Illzach, the school for the blind, conducted by Director Kunz, whose management of the institution, considering the limited means at his command, displays rare qualification. The manual skill of the pupils displayed in the manufacture of a large variety of brushes, rope and twine work, embossed printing, etc., deserves high commendation. I here found two interesting blind-deaf girls, aged about sixteen years, learning to read and write, and a handicraft by which they could aid in supporting themselves and their parents."

The account of the later stages of Mr. Hitz's tour is contained in letters to Dr. Bell. From the first one, written at Frankfurt-on-the-Main, and dated October 1, 1903, we take the following extract:

"During the last three days I have been attending the Sixth Congress of the Federation of German Teachers and Superintendents of School for the Deaf—embracing all who use the German language in giving instruction regardless of nationality: 'Bundesversammlung der Deutschen Taubstummlehrer.' Delegates attended from Germany, Russia, Hungary, Austria, and Switzerland. It proved a very successful affair. There were fully two hundred and fifty participants, of which only about one-sixth were ladies. The addresses were characterized by cordiality, and the papers and discussions in general gave every evidence of earnestness and thoughtfulness. The federation consists at present of twelve local Teachers' Unions, and several individuals where teachers have not organized, and numbers in all five hundred and fifty-four members. Dr. Walther, of Berlin, is president, and Director Vatter, of Frankfurt, presided as chairman.

"The programme, on the first day (following a reception given on the previous evening,) consisted in the forenoon largely of addresses of welcome and responses, and an hour devoted to a practice school conducted by Director Vatter himself, of five classes from pupils of three months' to four years' attendance. It was of course highly instructive, but resolved itself more into an examination than practical illustration of Oral teaching. The results achieved in voice training and lip-reading or speech, were certainly highly creditable, especially so in flexion of voice. At noon a luncheon was served, when Director Danger read a carefully prepared paper on the subject of rendering pupils self-reliant—to be achieved by a moral-religious and practical industrial training. This brought forth considerable discussion and the word 'self-supporting' was substituted for 'self-reliant.' The discussion showed that careful thought had been given to the subject, the details of which will no doubt appear in the official report. I enclose a picture of the Hall where the meetings were held and also the farewell reunion when Director Vatter, in feelingly saying goodbye, thanked me publicly for attending.

"On the afternoon (3 o'clock) of the first day's proceedings, an elaborate dinner was given in the Palmgarden Establishment's grand dining hall—orchestra, etc.

"On the second day, commencing 8:30 o'clock, Dr. (Ph.) P. Schumann of Leipzig, read an elaborately prepared paper on the subject of exacting a more scientific training of teachers of the deaf. This address, admirably delivered, will be well worth translating, and likewise the discussions in brief should they appear, as one can see how thoughtfully the subject was treated by the essayist and intelligently discussed by the speakers, who by no means all fully approved of what had been stated, but brought forth many practical phases which the essayist accepted, as they only forcibly strengthened his argument. I enclose a brief account of the subject which showed in substance that not only head work but also heart work was requisite in the full measure of requirements a teacher of the deaf must have.

"After luncheon some business matters received attention, and the next meeting was appointed to be held in Königsberg, in 1906.

"After a reunion at dinner in the Hotel Du Nord, the new Institution building of the Vatter school was visited—a model of perfection for the purpose. Mr. Vatter's appointments in the interior show clearly how completely and in some things ahead of the times he builded. There is ample room it seems to me for double the number of pupils, which at present is limited to

forty. Everything is plain and substantial, yet in good taste, and in his living department—dining room, etc.—decidedly æsthetic. The collections of material for object teaching is very comprehensive, and the drawings of the pupils from nature or objects exceeds anything I have seen of late in that line. The teacher of drawing must be exceptional. The location and grounds are all that could be wished, and Mr. Vatter stated were the result of his obstinately insisting in adhering to his choice although opposed by the Mayor of the City at the time, who wanted some other building placed there. The City pays 1,000 marks for each pupil unable to be paid for otherwise, and non-citizens have to pay 1,500 to 2,000 marks, many applications being declined on account of forty being the limit for admission at present. Refreshments were again tendered and in the evening a farewell gathering was held at the Hall where the meetings were held. Of course numerous brief addresses were delivered.

“The following day I left for Leipzig, where I visited the school founded 1778, by Samuel Heinicke, Director Voigt in charge. Dr. Gopfert and instructor Lehm are here exerting themselves specially to enrich their already well stocked library and pedagogical museum which they are ambitious to have equal the best in Europe.

“I have been unable to give much that would interest you of what was said of your having founded the Volta Bureau, and the gratitude expressed again and again by principals and teachers. You have thereby honored America in this line of educational effort far more than you imagine, and the generosity shown in the distribution of information is appreciated more than I myself believed. But the Volta Bureau, I can clearly see, could do far more for all these people if it could have the means to distribute information in at least three languages in place of only one. I have learned considerable in regard to what is being done here, and understand better now what it is best to try and do in the future.”

A second letter to Dr. Bell written from Rotterdam, and dated October 16, continues the account from which we quote:

“Before sailing tomorrow for New York I will try briefly to give you some account of my work since leaving Leipzig. First followed a visit to the Berlin (A. Gutzmann, Dir.)¹ Public Day School—admirably located on one side of a large open

¹A most interesting feature of my visit was the acquaintance of Dr. Herman Gutzmann, son of Director Gutzmann, the eminent author and specialist on defects of speech—whose laboratory and library in this line are probably unsurpassed in Europe.

court, the other two fronts of the court being occupied by elementary public schools and a public technical high school for girls. It was opening day and many mothers came with their children to be entered (6-7 years). The city pays from 1,200 to 1,300 marks annually for car tickets for children whose parents can not afford the expense. The rooms are well arranged, classes 8-12 in each (aim is to have 10 or less). Teachers appear to understand their work thoroughly and the pupils with few exceptions are equally bright to average hearing children of the same age or a little younger. This can certainly be called a model pure Oral school. It is equipped with the same excellence that schools for the hearing receive—admirably arranged for effective object teaching. Speech seems to be generally distinct and the voices are evidently as far as possible trained to be natural. Of course the backward or mentally slightly feeble are in classes to themselves, receiving special training.

“Dr. Walther was absent and neither his practice school or Normal Training Classes as yet open. But Madame Walther gave me many interesting items about her husband’s work which I will reserve for a verbal account.

“Thence to the Ostfriesland School of our friend Director Danger. Here is a sample of a very simple, plain school for the very poor of the vast heath and moor region of north-west Germany, a most faithful and well qualified director teaching with an assistant eleven boys, and a most active, enthusiastic wife, with an assistant, twenty-six girls—the latter strange to say being so much more numerous. There was no school, it being vacation, but I saw the work the boys and girls could do in gardening, carpentering, and housework—sewing, cutting, and fitting—which would do credit to artisans of some pretension. Here every child when it leaves the school is carefully kept track of and aided to make it self-supporting if necessary. Several girls have been supplied with sewing machines, and to judge from letters of the pupils I read, they have more work than they can handle, and are particularly thankful for the ability to help support their families.

“Next to Groningen, where I found an interesting school, first on account of its valuable library, and even more so for the faithful work that is there being done for almost hopeless defectives, mentally so and organically. For boarding and lodging purposes separate buildings are provided for Jewish and Christian children; mental and manual training they receive jointly. All of the teachers are men, and some of them certainly show an interest in their pupils which could not be surpassed. And in turn the pupils seem to respond as gratefully as they can. Shoe-

making, cabinet-making, tailoring, needlework of all kinds, and other suitable handiwork received careful attention—the teachers being generally the same who instruct hearing classes in the public schools. Director Roorda is a scholarly gentleman, exceptionally well qualified for the responsible position he holds.

“The last school visited was the one in this city on *Amman Street*. Director Fehmers, who took me around, is an experienced teacher, and I should say the pupils on the whole (excepting a single class organically defective) would compare favorably with hearing children. The building is well suited for the purposes, and here as everywhere else the founder of the Volta Bureau and the work he has by means of it accomplished, came in for many kindly appreciative expressions.

“In Amsterdam, Groningen, Leiden, Haarlem, The Hague, and in Warmond, I spent much time in trying to get something more definite about Amman than has been given to the public so far. The name here has dropped out of existence, except so far as Amman was the author of several well known books. Could I have given a month in place of only ten days to looking up the matter, something could certainly have been unearthed. As it is I have made the personal acquaintance of several reliable persons who will aid me in the researches I have started. I find that Amman was married to one Maria Birrius, and had a son named Elias. Furthermore that Amman owned real estate in Warmond, a fashionable suburb of Leiden, the university town. I found further that a John C. Amman attended the Leiden University after the death of J. C. Amman, Sr., and I have reason to believe said J. C. A. was a son of the Doctor. In the Warmond cemetery I found the ‘Lord of Leiden’ buried, but could not ascertain certainly anything about Dr. Amman, as the church records could not be reached, but I have the promise of the pastor of the Protestant Church in Warmond that he will carefully look up the matter, and in The Hague, the Secretary in Chief of the State Archives where many old town records are deposited, has placed his services at my command to have further search made. As it is, I have made a beginning at least, and may be spared to see some fruitage result.”

NOTES AND NOTICES.

The Board of Regents of Westminster College, Fulton, Mo., recently conferred the degree LL. D. upon Superintendent J. N. Tate of the Faribault, Minn., School, and Superintendent J. R. Dobyns of the Jackson, Miss., School. Both the gentle-

men are graduates of the college conferring the degree, Dr. Tate being of the class of 1873, and Dr. Dobyns of the class of 1874.

The work of the instruction of the deaf in Great Britain has suffered a great loss in the death of Mr. James Howard, the Headmaster of the Yorkshire Institution, at Doncaster, which occurred on the 18th of September. Mr. Howard was thoroughly experienced in the use of all methods of instructing the deaf, earlier in his professional life receiving training in and for nine years practicing the manual method, and later taking up the oral method of which he became, and continued to the end, an earnest and enthusiastic exponent.

Dr. E. M. Gallaudet, president of Gallaudet College, Washington, D. C., has the sympathy of all who know him in his recent great loss by death of his wife and helpmeet. Mrs. Gallaudet passed away suddenly and unexpectedly on November 4, after a brief illness incident to a hospital operation.

Superintendent W. K. Argo of the Colorado Springs, Colo., School has made a tour recently visiting and inspecting various schools west of the Mississippi River. The practice of a superintendent visiting other schools than his own for purposes of observation and study, can not be too highly commended nor too widely imitated.

Teachers wishing positions and Superintendents wishing teachers may avail themselves of the office of the General Secretary of the American Association to Promote the Teaching of Speech to the Deaf so far as it may be of service to them. The General Secretary aims to keep a list of teachers, and one of Superintendents, belonging to the above classes, ready for use by any person who may write for them.

Reprints in pamphlet form of "My List of Homophenous Words," by Emma Snow, may be obtained through the office of the General Secretary. Price for single copies, 25 cents.

Reprints in pamphlet form of the series of papers that have appeared in recent numbers of the REVIEW on "Formation and Development of Elementary English Sounds," by Caroline A. Yale, may be obtained by addressing the office of the General Secretary. Price for single copies, 25 cents.

NAMES AND ADDRESSES OF MEMBERS OF THE
AMERICAN ASSOCIATION TO PROMOTE THE
TEACHING OF SPEECH TO THE DEAF.

DECEMBER, 1903.

*Deceased Members. †Original Promoters. §Subscribing Members.
||Life Members. ¶Honorary Members.

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